

RESTORATION OF PEREGRINE FALCONS TO WISCONSIN  
PERFORMANCE REPORT, 1 July 1991 to 30 June 1992

by Charlene M. Gieck

Attachments by Jim Surdick, Patricia Skewes and Melissa Grover,  
Jonathan Melk and Mary Parisi, Roarke Donnelly and Debra Guenther

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--- SUMMARY

No adult peregrine falcons were observed at Mississippi River nest sites during 1992. A nesting pair at Milwaukee produced four young, three of which are still alive. Peregrines returned to the State Capitol building and produced one young; a captive raised young was added to the nest. A new pair was discovered in Sheboygan. Two young were produced, one lived only a short time and was later replaced with a captive raised young.

A total of 41 young were released at three release sites. Sixteen young including two rehabilitated birds, were released at La Crosse. There were two deaths and two injuries. Ten young were released at Racine with no fatalities or injuries. Fifteen young were released at Kenosha. Two young were injured, one was released again, the other's condition is pending.

Unhatched eggs and carcasses were turned over to the National Wildlife Health Research Center, Madison, WI.

The newsletter Peregrine Panorama was distributed to interested parties. Several talks were given about peregrines.

On-going contact with other states provided information on Wisconsin released birds. A 1990 Madison released female nested in St. Louis, Missouri; a 1990 Madison released female nested in East Chicago, Indiana; a 1991 La Crosse released female nested in Becker, Minnesota.

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WISCONSIN DEPARTMENT OF NATURAL RESOURCES  
BUREAU OF ENDANGERED RESOURCES  
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Study 212: RESTORATION OF PEREGRINE FALCONS TO WISCONSIN

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- Job 212.2: Reintroduction Program
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## RECOMMENDATIONS

Releases of young falcons should be continued for one more year if funding is available. One of the existing sites should be used.

A nest box should be installed at the La Crosse City Hall building.

The Mississippi River survey should be expanded to more than one day. A survey is needed for the areas along the Wisconsin River, Door County and Lake Michigan shoreline.

The cooperative agreement between Wisconsin Peregrine Society and Wisconsin Department of Natural Resources should be finalized.

The newsletter should be continued. Many people find it easy to read and informational. People enjoyed the naming contest and the follow up notification.

### Job 212.1: INVENTORY AND PROTECT NESTING HABITAT

Objectives: Update and expand information gathered by the Nature Conservancy in 1986. Complete assessment form for three historic nest sites per year. Coordinate an annual spring breeding survey. Complete management form for two sites per year. Implement recommendations in plan which may include tree cutting, predator control, sign posting, etc. Consult plat maps and landowners to determine ownership and land usage patterns for six potential sites.

Procedures: Activities are outlined and described in the Wisconsin Peregrine Falcon Recovery Plan (Gieck 1987).

Findings: Funding was not available for preparation of management plans and so no action was taken.

An annual survey of the historic sites on the Mississippi River was conducted in May 1992 by the Minnesota Falconers Association. No peregrines were seen along the river. Other observations by the general public were investigated when appropriate.

Breeding pairs were present in Madison, Milwaukee and Sheboygan.

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In 1991 a pair attempted to nest on a small ledge of the State Capitol, ignoring the nest box located at a higher level. In 1992 the nest box was used. The pair in Madison consisted of a 1991 wild-produced female from Minneapolis and a 1990 released male from Madison. Two eggs were produced, but only one hatched. A captive-raised chick was added to the nest. The adult male was found dead at the time of banding the chicks. But another adult male (a 1989 Madison released bird) was already at the site. When the young began to fly, the new adult tried to attack to young birds. The young female was observed being hit by the adult. She was moved to a nest site in St. Paul after being examined. An attempt was made to capture the young male, but he was flying too well and eluded us. Approximately four weeks later, someone observed the adult hitting the young male. His remains were found on a roof top. The adults are occasionally seen at the Capitol.

Milwaukee had continuing nesting success. The 1991 pair returned to produce four eggs, all of which hatched. One chick was killed by a car shortly after a severe rain storm. At least one of the other young have been seen at the Racine and Kenosha release sites.

A new pair was found at the Sheboygan power plant. The female is a 1989 released bird from Chicago, the male a 1990 released bird from Madison. Four eggs were produced, only two hatched. At the time of banding one surviving chick was found and only one egg. It is assumed that the adults removed the other egg and chick. A captive-raised young was added to the nest. Both fledged.

#### Job 212.2 REINTRODUCTION PROGRAM

Objectives: Prioritize areas/sites annually for release of peregrine falcons. Install boxes, prepare legal agreements, consult with building managers, cover vents and fans, etc. Obtain permits from USFWS for predator control if needed. Prepare purchase order, make arrangements to receive chicks from The Raptor Center. Construct hacking tower/boxes at new sites. Acquire peregrine food. Hire hack site attendants. Conduct release of falcons. Conduct annual survey to monitor past release sites. Investigate reports by public of peregrine falcons.

Procedures: Activities are outlined and described in the Wisconsin Peregrine Falcon Recovery Plan (Gieck 1987).

Hacking procedures were followed as described in "Hacking: a method for releasing peregrine falcons and other birds of prey" (Sherrod, et al 1982).

Findings: Three release sites were active in 1992: City Hall at La Crosse, Pleasant Prairie Power Plant at Kenosha and County Courthouse at Racine.

Legal agreements were created and signed for all the sites.

Twenty peregrine falcon chicks were purchased from The Raptor Center, St. Paul, MN. An additional 17 young were purchased by Wisconsin Peregrine Society. Food (coturnix quail) for the peregrines was obtained from a quail farm in Illinois.

Patricia Skewes, Roarke Donnelly and Jonathan Melk were hired as the lead attendants. Melissa Grover, Mary Parisi and Debra Guenther were hired as the assistants. The attendants were responsible for the care, feeding and monitoring of the peregrines at the sites.

The La Crosse site started in early May. Fourteen young were released at La Crosse. Two additional rehabilitated birds were also released at the site. One young died due to a bad heart, one died probably due to collision with a car, one was removed because it was too accustomed to humans (but later released), one suffered a severe wing injury but was released again. One of the additional birds, recovering from a disease, hit a window and was returned to The Raptor Center.

Ten young were released at the County Courthouse in Racine in June. No injuries or fatalities have happened.

Wisconsin Electric Power Company provided full funding for the release of fifteen young at Pleasant Prairie Power Plant, Kenosha, in July. Two young were injured. One was released again, the other's condition is still pending.

All young were banded with USFWS leg bands and anodized black and white bands from Minnesota. The birds' wings were also color marked with spray paint for temporary identification purposes.

The media was invited to view the birds on their day of arrival. Many journalists remained interested and did several stories. Informational displays were provided where allowed.

Details of the release project are found in the individual hack site attendant reports which are attached.



### 212.3 PROVIDE PROTECTION

Objectives: Review falconry regulation changes. Notify wardens of when and where activities will be taking place. Assist with case investigations. Prepare raptor identification brochure for hunters, trappers and falconers. Prepare program for law enforcement recruits one raptor identification. Research if contaminants are prevalent in peregrine eggs and/or prey items. Provide recommendations to prevent environmental contamination.

Procedures: Activities are outlined and described in the Wisconsin Peregrine Falcon Recovery Plan (Gieck 1987).

Findings: No changes were made in the falconry regulations.

Local wardens and wildlife staff were notified prior to the arrival of the peregrines.

Funding was not available for the development of an identification brochure.

One unhatched egg from Madison and one from Sheboygan were sent to the National Wildlife Health Research Center (NWHRC) for analysis. The adult male from Madison was sent to The Raptor Center. He was too decomposed to determine cause of death. The remains of other dead peregrines will be sent to NWHRC.

### 212.4 COORDINATION, INFORMATION & EDUCATION

Objectives: Attend regional peregrine symposium, chair Wisconsin Recovery Team and distribute newsletter. Develop informational display at release sites. Distribute slideshow/video. Disseminate written materials available. Prepare "outdoor reports", submit articles to journals and conduct interview with media people. Submit annual report to Passenger Pigeon for publication.

Procedures: Activities are outlined and described in the Wisconsin Peregrine Falcon Recovery Plan (Gieck 1987).

Findings: Patricia Skewes gave a presentation of the Wisconsin program at the annual Midwest Peregrine Symposium in St. Paul in March.

The Peregrine Panorama newsletter was written and distributed during the field season. The mailing list has approximately 300 people on it.

Presentations were given to several interested groups.

On-going contact with other states provided information on Wisconsin released birds. A 1990 Madison released female nested in St. Louis, Missouri; a 1990 Madison released female nested in East Chicago, Indiana; a 1991 La Crosse released female nested in Becker, Minnesota.

#### 212.5 ANNUAL REPORT

Objective: Prepare annual report.

Procedure: Write a summary of the year's activities.

Findings: The report was written.

#### LITERATURE CITED

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Sherrod, S.K., W.R. Heinrick, W.A. Burnham, J.H. Barclay and T.J. Cade.

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Avian Ecologist  
Bureau of Endangered Resources

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Peregrine Falcon Project  
1992 Capitol Nest Site  
by Jim Surdick



Near the top of the capitol is a man made nesting structure facing King St. In early spring two peregrines began to show a liking for the site. Alula (the female) and Jade (the male) nested at this site.

#### A. Summary of major events.

5/10 Approximate date of Electra's (97R) hatching

5/22 Icarus (83Z) is released into the nest box

6/8 Approximate date that Jade died and the arrival of Calvin

6/11 Both chicks are banded and bled

6/15 Both chicks leave the nest box

6/21 Electra is believed to be knocked out of the sky and is then captured and sent to St. Paul

6/24 An attempt is made to capture Icarus

7/22 The remains of Icarus are picked up from Ogg Hall

Alula laid two eggs. Only Electra hatched; the other egg was taken from the nest so that test could be done to determine what was wrong with it. Icarus was obtained from a breeder in South Dakota and was added into the nest. Around the time of Jade's death another adult male showed up. He was identified as a Madison released bird, Calvin (48T). When the chicks left the nest box Calvin showed aggression by stooping both chicks often. He is believed to have killed or aided in the death of Icarus. Many courtship flights and food exchanges took place throughout the summer between Alula and Calvin.

#### B. Behavior patterns

Perch sites: When Jade was alive and present at the capitol he spent the majority of the time perched on the statue, "Wisconsin". When she wasn't out hunting, Alula spent most of her time on the railing next to the nest box. After the chicks left the nest box she spent the majority of the time perched on the ledge above the second

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observation deck (the base of the rotunda). This ledge was most frequently used by Calvin.

When Icarus was flying around Madison he was usually found near the Capitol Square Apartments. Alula could be found often perched on the large antenna next to the Johnson St. fire station. For a few weeks Icarus could be found on the west side of the capitol. His position varied greatly while in this vicinity. Alula would often perch on the ATT building.

Flight patterns: When Calvin first showed up he spent the first few days soaring very high above the capitol. He came down from soaring two times to stoop at crows but then immediately returned to soaring. At least four food exchanges were documented between Alula and Calvin. It also seemed as if they would hunt together or at least leave the capitol together and in the same general direction. While Alula was perched on the ledge Calvin was seen making repeated swooping flights in front of her. This happened on several occasions. It was interesting to watch as Icarus was stooped more by Calvin he found it more advantageous to take to the air and confront Calvin by rolling and exposing his feet. When Icarus acted in this manner Calvin would not touch him.

Affects on other birds: According to the grounds people at the capitol the pigeon population decreased with the arrival of the Peregrines. Whenever I saw a pigeon flying over the capitol grounds they would fly very low and very close to the building. The only attempt at a kill that I observed was on June 10. Alula grasped on to a pigeon that had turned over, allowing the pigeon to extend its wings unabling Alula to fly. She then landed on a nearby building and allowed the pigeon to fly off. Crows were subjected to many stoops throughout the summer. However I did not find any prey remains left at the capitol. In The Peregrine Falcon by Ratcliffe he states that he has seen peregrines kill crows but I do not believe it occurred with this pair. Gulls were allowed to freely cross the capitol grounds, also an observed prey item by Ratcliffe.

### C. Prey

Figures 1 and 2 give a summary of the prey remains found at the capitol and two observed feedings to Icarus away from the capitol.

It is impossible to determine how much the peregrines were eating from this data. Many birds were found whole or just partly eaten. I tried to eliminate double counting by grouping scattered

## Peregrine Prey:

5/5/92

Sora Rail

Yellow Rail

Blue Jay

American Woodcock

Brown Thrasher (2)

Catbird

White-throated Sparrow (3)

Yellow-shafted Flicker

House Sparrow

Red-winged Blackbird (female)

5/14/92

House Sparrow

Starling (3)

Common Grackle

Mourning Dove

Yellow-billed Cuckoo (2)

Red-headed Woodpecker (2)

Swainson's Thrush

Northern Oriole (immature)

Sandpiper (sp. ?)

Sora Rail (3)

Cowbird (male)

Brown Thrasher

Blue Jay (2)

Robin

Rose-breasted Grosbeak (male)

American Woodcock

Little-brown Bat (a wing was found, may not have been killed by the peregrines)

5/19/92

Rose-breasted Grosbeak (2 males and 2 females)

Red-winged Blackbird (male)

Dickcissel

Starling

Mourning Dove

Eastern Kingbird

Gray-cheeked Thrush

Scarlet Tanager (female)

Yellow-shafted Flicker

Mourning Dove

Yellow-billed Cuckoo (2)

Black-billed Cuckoo

5/22/92

White-throated Sparrow

Brown-headed Cowbird (3)

Fox Sparrow

Yellow-shafted Flicker

Swainson's Thrush

5/26/92

Starling

Black-billed Cuckoo (3)

Sora Rail (2)

Common Snipe

Catbird

Yellow-billed Cuckoo

5/29/92

Black-billed Cuckoo

Blue Jay (2)

Eastern Kingbird

Yellow-billed Cuckoo

Brown Thrasher

Red-winged Blackbird

Sora Rail

6/4/92

Black-billed Cuckoo (2)

Yellow-billed Cuckoo

Sora Rail

Starling

House Sparrow (2)

Brown-headed cowbird

American Woodcock

Vesper Sparrow

Red-eyed Vireo

6/11/92

Blue-winged Teal (female)

Northern Oriole (immature)

Black-billed Cuckoo

Gray-cheeked Thrush

6/15/92

Blue Winged Teal (male)

Black-billed Cuckoo

Blue Jay

Common Gallinule

Least Bittern

Northern Oriole (immature)

Red-winged Blackbird (female)

6/16/92

Yellow-billed Cuckoo

6/18/92

American Woodcock

Brown Thrasher

Yellow-billed Cuckoo (3)

Black-billed Cuckoo

Least Bittern

Cardinal (female)

Starling

Rose-breasted Grosbeak (male)

Rock Dove

Mourning Dove

Virginia Rail

6/24/92

Rock Dove (Alula fed to Icarus on the  
Concourse Hotel)

6/25/92

Yellow-billed Cuckoo

6/27/92

Blue-winged Teal (male) (Alula fed to  
Icarus on the Capitol Square Apt.)

6/30/92

Found in the nest box

Mourning Dove

Common Coot

Brown Thrasher

Black-billed Cuckoo

Blue Jay

Found on the observation decks

Black-billed Cuckoo (3)

Yellow-billed Cuckoo

Catbird

Common Grackle

Northern Oriole (male)

7/13/92

Yellow-billed Cuckoo (3)

Black-billed Cuckoo (5)

Rose-breasted Grosbeak (male)

Grackle (7) (one immature)

--of the birds found on the 13th close to  
half were badly decomposed. This  
collection followed a series of storms that  
washed down birds that were cached  
near the very top of the capitol.

Around Aug.1 a homing pigeon was found  
at the capitol

Black-billed Cuckoo-21  
 Yellow-billed Cuckoo-16  
 Grackle-10  
 Sora Rail-8  
 Blue Jay-8  
 Starling-7  
 Rose-breasted Grosbeak-7  
 Brown Thrasher-6  
 Mourning Dove-5  
 Brown-headed Cowbird-5  
 Red-winged Blackbird-4  
 Northern Oriole-4  
 American Woodcock-4  
 House Sparrow-4  
 White-throated Sparrow-4  
 Yellow-shafted Flicker-3  
 Catbird-3  
 Blue-winged Teal-3  
 Gray-cheeked Thrush-2  
 Swainsons Thrush-2  
 Eastern Kingbird-2  
 Least Bittern-2  
 Red-headed Woodpecker-2  
 Rock Dove-2  
 Cardinal  
 Common Coot  
 Common Gallinule  
 Common Snipe  
 Dickcissel  
 Fox Sparrow  
 Homing Pigeon  
 Red-eyed Vireo  
 Robin

Sandpiper sp.?  
 Scarlet Tanager  
 Vesper Sparrow  
 Virginia Rail  
 Yellow Rail  
 (Little-brown Bat)

A total of 149 prey specimens  
 and 38 different species.

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parts. For example if a left cuckoo wing was found on June 6 and a right wing on June 12, this was counted as one bird.

This is not an accurate measurement of the actual number of birds consumed because some species or individuals were not counted because the remains were taken by crows, or the capitol grounds maintenance crew. Other prey pieces may have fallen onto unaccessable parts of the capitol.

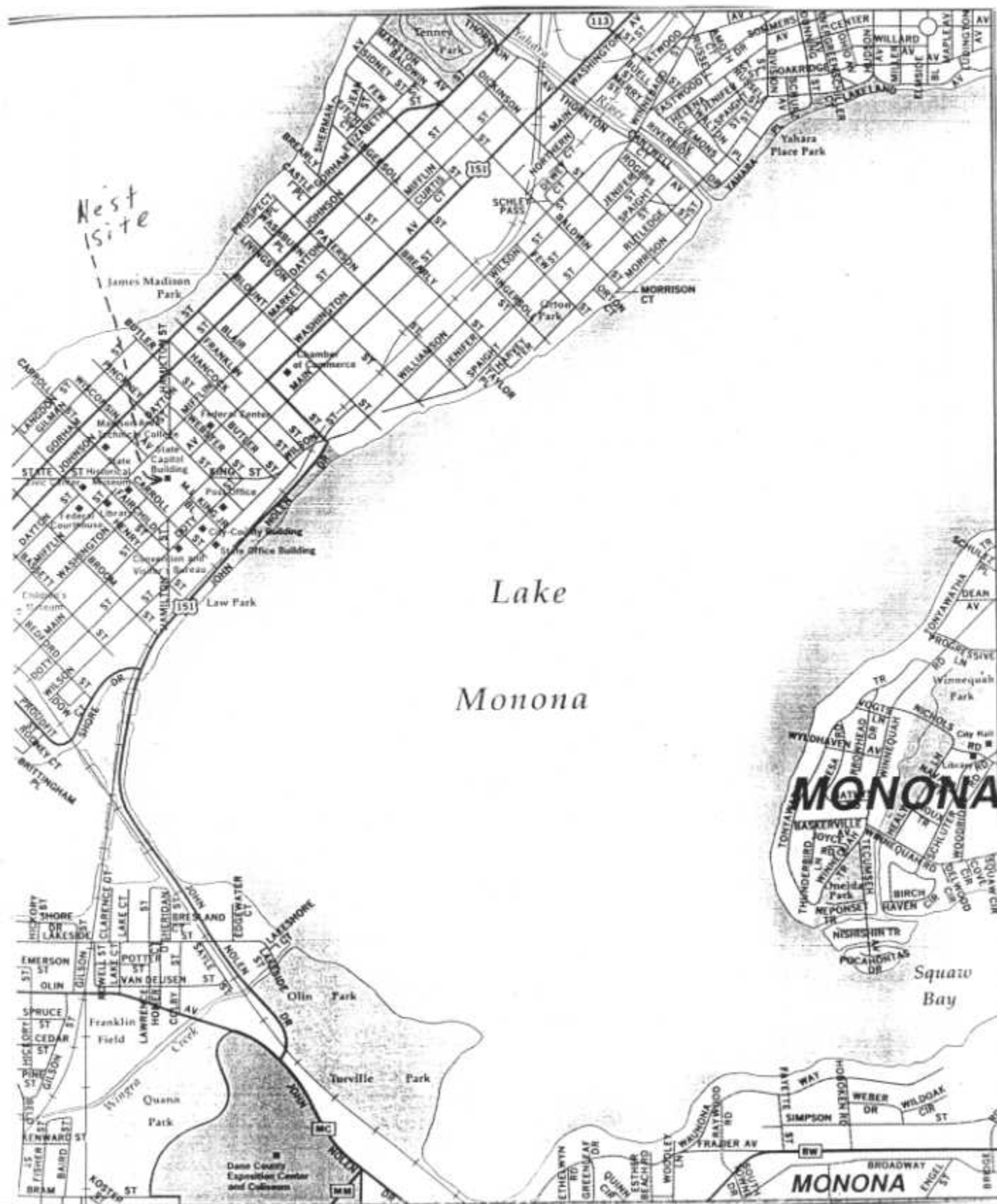
Figures 3,4,5, and 6 are maps of the Madison area obtained from the Madison phone book. From this one can see the wide variety of areas the pair could hunt. According to Ratcliffe it is estimated that peregrines do most of their hunting within four miles of the nest and range as far out as nine miles. Most to all hunting flights that I observed were made in a south or easterly direction. Most of the birds that were obtained were either marsh birds or edge species. Inner Lake Marsh or Monona Wetlands are four miles away, Nine Springs Marsh is 3 miles away, and UW Arboretum is as close as 1.6 miles away. All of these places are within range and lie in a south or easterly direction. Other possible hunting grounds are, over the two large lakes. Both lakes are within a half of a mile. Alula was observed swooping down E Washington and State St.

#### D. Public Response

Throughout the course of the summer the nesting pair were covered on local television stations up to four times and in the local paper at least three times. A telescope was set up on the capitol grounds lunch hours and Saturdays during the farmer's market. The scope allowed hundreds of curious onlookers to get a better view of the residence on top of the capitol. While looking through the scope many people were informed on the status of the peregrine project, peregrine habits and facts, and other projects initiated by BER and the DNR. Over all I believe that the majority of the general public supports this effort. There was little to no negative responses recieved by myself.



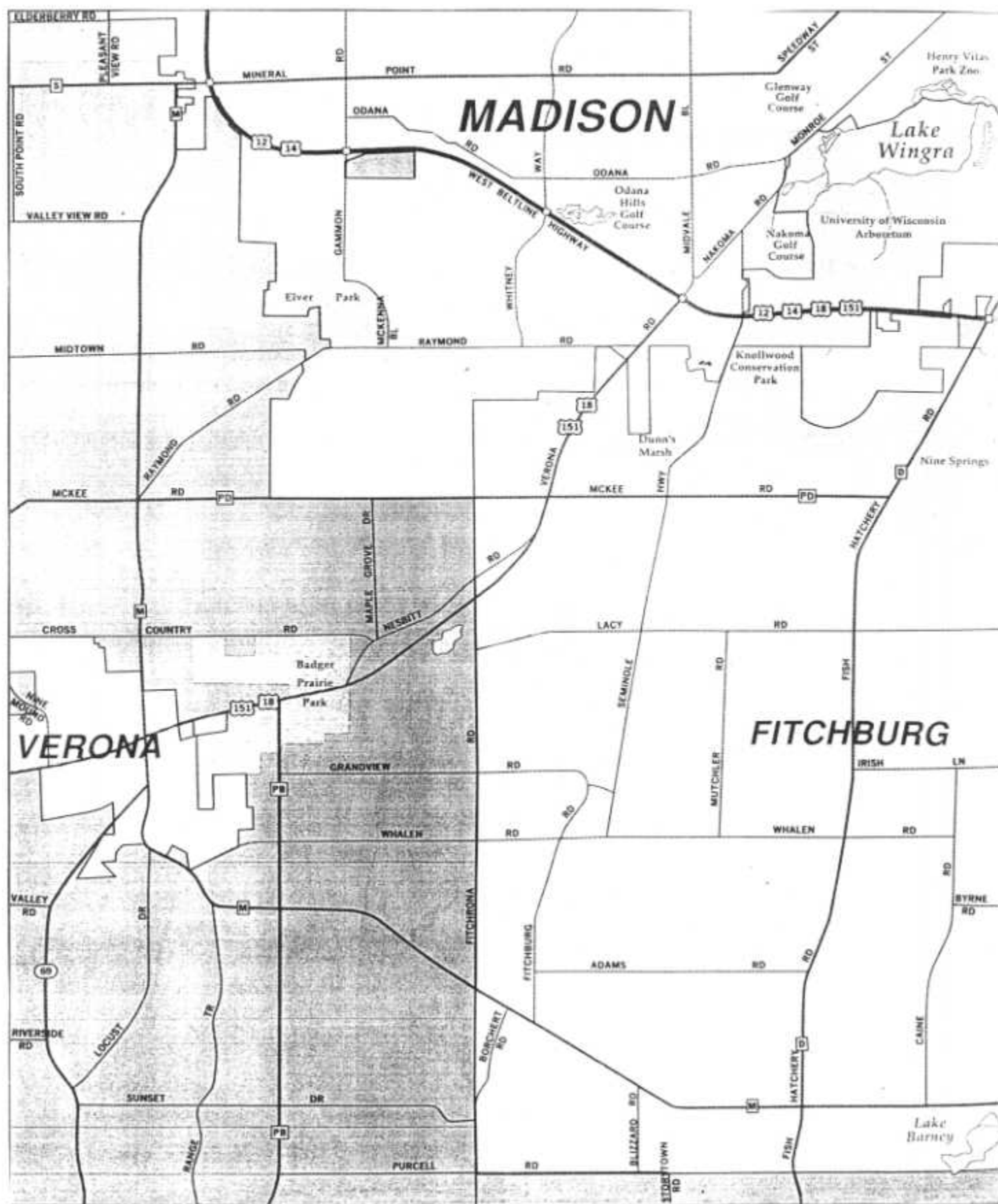
Nest site and surroundings



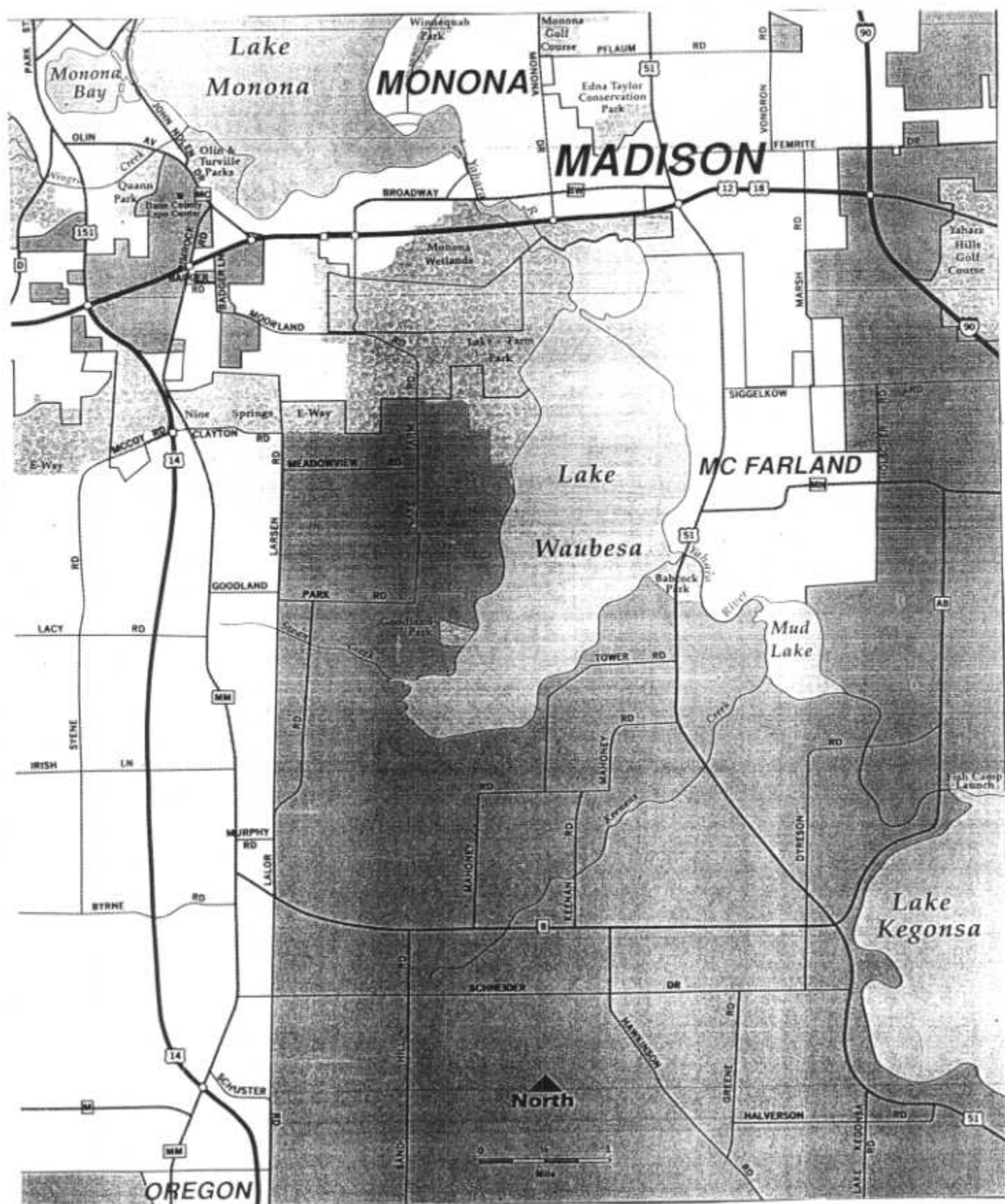
Area west of the nest site



## Southern hunting grounds



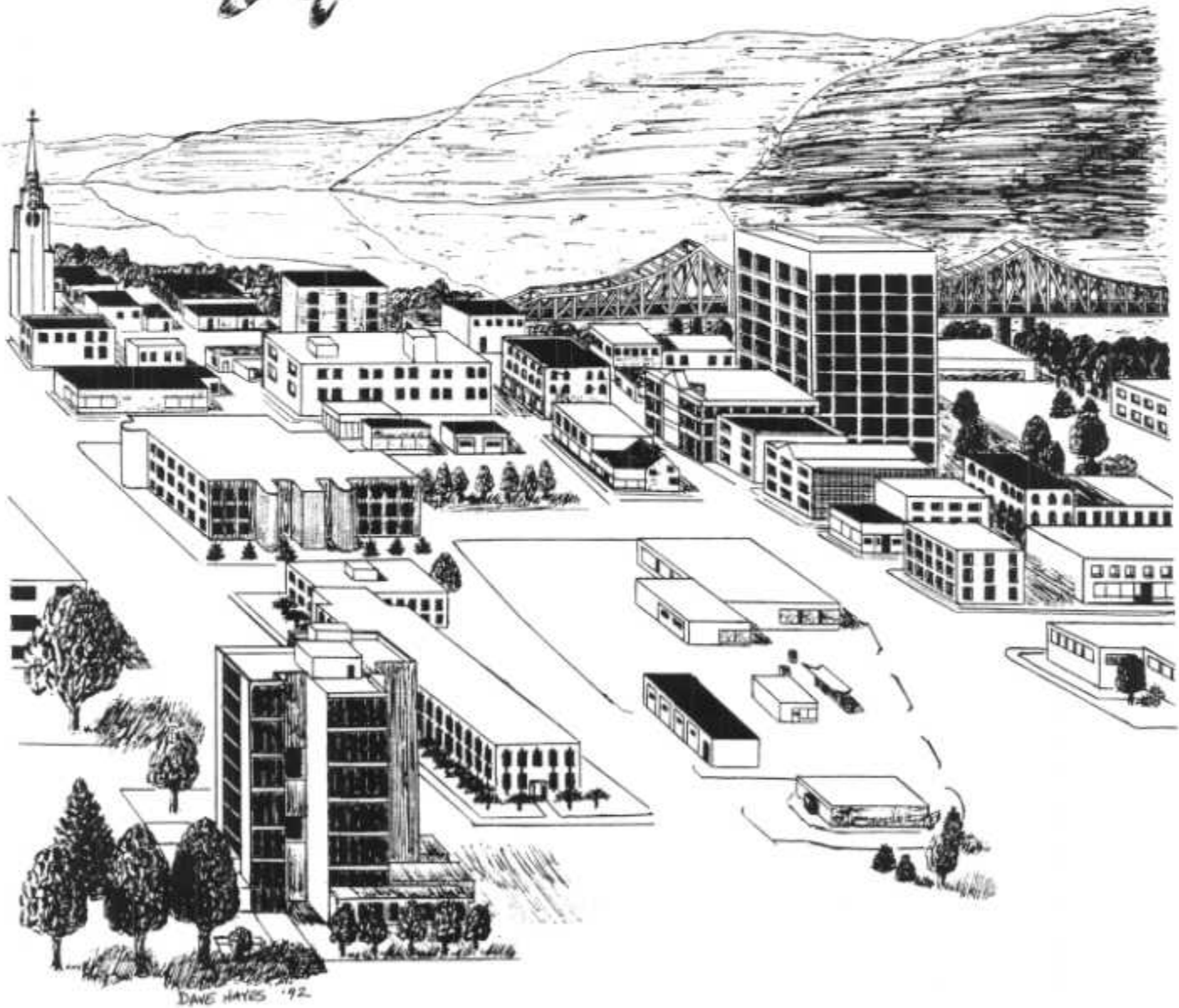
## Southern and eastern hunting grounds





1992 PEREGRINE FALCON  
RELEASE PROJECT

LA CROSSE, WISCONSIN



BUREAU OF ENDANGERED RESOURCES

# PEREGRINE FALCON RELEASE AT LA CROSSE, WISCONSIN

1992

## 1. HACK SITE ATTENDANTS

Patricia Skewes  
N 1420 Schieche Road  
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Baraboo, WI 53913  
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## 2. SITE DESCRIPTION

The hack site was the roof of the La Crosse City Hall (Fig. 1.).



Figure 1. La Crosse City Hall, viewed from the northeast. Hack box location is marked by black circle.



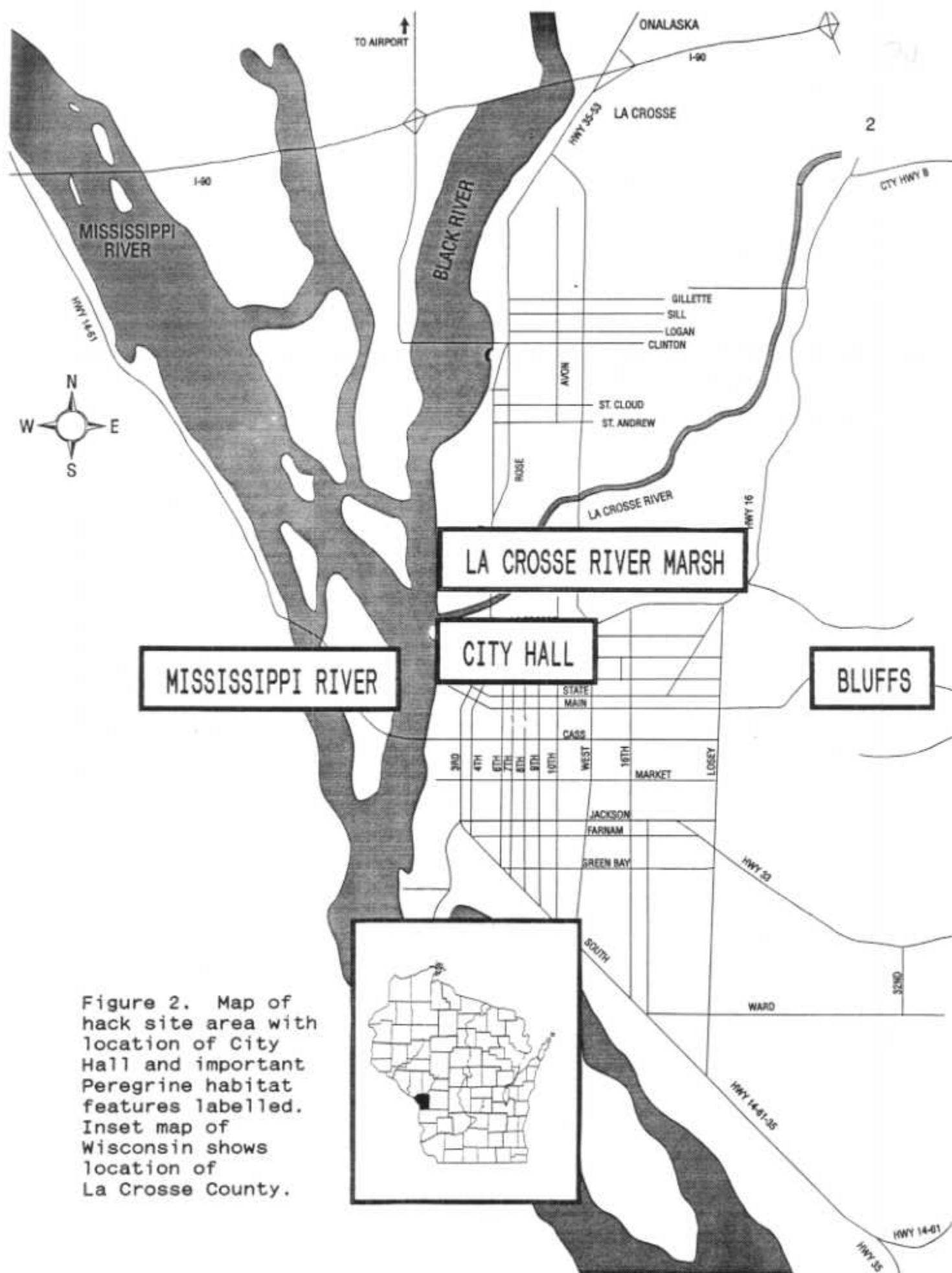


Figure 2. Map of hack site area with location of City Hall and important Peregrine habitat features labelled. Inset map of Wisconsin shows location of La Crosse County.

La Crosse is a small city (population 50,000) located in southwestern Wisconsin on the east shore of the Mississippi River. The landscape in this unglaciated "driftless area" consists of deep valleys, high bluffs, and Mississippi backwaters. Although situated well within the city, the site (Fig. 2) is nevertheless only one block from the La Crosse River marsh, and 0.5 mi. from the confluence of the La Crosse, Black and Mississippi Rivers. Granddad Bluff, which rises 600 ft. above the river, is 1.7 mi. to the east. Lake Onalaska (Pool 7, Upper Mississippi River) lies 4 mi. to the north.

City Hall, located at 400 La Crosse Street, is a six-story gray exposed-aggregate concrete building with black slate panels surrounding the windows. Windowed sections are inset, giving the building's roof a good variety of perch sites. Corner posts, a machinery room, and an elevator shaft project above the main roof to provide additional perch heights and shaded areas. One- and two-story wings provide lower landing sites for Peregrines which need them.

The hack box was placed in the southeast corner of the main roof, with the open side facing SSE with a view of the city. Nearby buildings are all shorter than the City Hall.

Because the City Hall is the tallest building in the vicinity, we had no bird's eye view of the hack box. Nearly all of our observations were made from the ground. We also had access to the roof of the four-story Kumm Building of WWTC (one block south) and frequently made observations from there. The City Hall roof is surrounded by a 12" ledge, further limiting the view from the ground. Birds in the hack box or on the roof deck were not visible from the ground. This year we placed the hack boards on top of the hack box so we could observe the Peregrines as they fed.

### 3. HISTORY AND DETAILS OF YOUNG

Identification numbers, hatch dates, breeder names and data on genetic histories are presented in Table 1.

Table 1. Genetic History and banding data on Peregrine Falcons hatched in La Crosse in 1992.

Sex	Subspecies	USFWS Band	Proj Band	Hatch Date	Age into box	Breeder
GROUP I						
F	brookXanatum	1807-34802	71R	03-27-92	35	S. Sherrod
F	brookXbrook	1807-34801	70R	03-27-92	35	J. Harrel
M	brookXanatum	2206-13770	42Z	03-27-92	35	S. Sherrod
M	brookXanatum	2206-13771	43Z	03-27-92	35	S. Sherrod
GROUP II						
F	anat/pealXanat	1807-34810	81R	04-24-92	34	SD Raptor T
F	pealXpeal	1807-34809	80R	04-19-92	39	SD Raptor T
M	pealXpeal/brook	2206-13780	54Z	04-22-92	36	SD Raptor T
M	pealXpeal/brook	2206-13781	55Z	04-22-92	36	SD Raptor T
GROUP III						
M	anat/pealX anat/peal	2206-13755	88Z	05-10-92	40	SD Raptor T
M	pealXanat/peal	2206-13756	92Z	05-12-92	38	Widener/ Jenny
M	pealXpeal	2206-13757	93Z	05-13-92	37	SD Raptor T
M	pealXpeal	2206-13758	94Z	05-15-92	35	SD Raptor T
F	anat/pealX tund/brook	1807-34836	07W	05-16-92	34	SD Raptor T
F	anat/pealX tund/brook	1807-34837	12W	05-16-92	34	SD Raptor T
OTHER						
M	?Xpeal/?	2206-18402	14N	05-25-92	52	Widener
M	pere/tundX pere/peal	2206-13872	59X	05-02-91	>1yr	Haak

### 4. PRE-RELEASE DETAILS

#### Facility and procedures

The 5'Lx4'Wx3'H hack box was made to the plans provided by Charlene Gieck of the Wisconsin DNR. It included a "fish-eye" peephole on each solid side plus a 1/2" flap-covered peephole on the long side. The hide was equipped with a hinged plywood door which was held in the open position by a barrel bolt. The food chute was made from two back-to-back plastic pipe toilet flanges and closed with a screw-in plug. The box was built in modules so it could be carried to the City Hall roof in pieces and assembled. The City Hall roof is rock-covered rubber membrane which is vulnerable to puncture. The pathways and site for the box were covered with rubber conveyor belting to protect the

membrane. Three runners of 2X4 wood were placed under the box to keep it off the often wet belting. The box could not be fastened down to this roof, so it was held in place by weight. In addition to the pea gravel and perch rocks in the box, concrete patio stones were stacked on two plywood "wings" hinged to the ends of the box. A 9x13" bathing pan was provided in the box.

The ledge around the City Hall roof is sloped and covered with slick aluminum flashing. Because we feared the fledging birds might slip on this ledge, we covered sections of the ledge near the hack box with indoor-outdoor carpet secured with duct tape. We provided a shallow 18"x24" bathing pan on the roof deck. Water was changed once a day and the pan frequently scrubbed with disinfectant.

While the birds were in the box they were fed de-winged Coturnix quail (1-2 quail per Peregrine per day) twice a day through the food chute. We tore the food birds open until our observations assured us that the Peregrines were capable of opening their own food. Uneaten food was removed once a day. Water in the bathing pan was changed at least once a day, more often if necessary.

We observed the Peregrines in the hack box two or more times a day. When we looked through the fish-eye viewers, the birds seemed undisturbed by our presence, but whenever we used the open 1/2" viewing hole the birds interrupted their activities and watched us. They were very aware of an eye at that hole. The fish-eyes occasionally became spotted with water or other material and were wiped clean when we changed the water pan. Observations of the birds in the box were recorded onto forms designed to facilitate the recording of activities of several active birds. We paid special attention to plumage condition, feeding, and to behaviors that measured readiness for release (balance, stationary flapping, flying at bars or walls, pacing). We also assessed each bird's apparent health from feeding, activity level and condition of mutes.

Although three main groups of Peregrines were released in 1992, we had 8 release events! Three birds were held back because of illness or immaturity; one rehabilitated 1991 Iowa bird was re-hacked here; two 1992 La Crosse birds were re-hacked after recovery from physical or behavioral problems.

#### Pre-release narratives for each group

Group I was brought from The Raptor Center by Charlene Gieck and Pat Skewes in Charlie's pickup truck on May 1. Television, radio, and newspaper reporters were on hand to interview the birds and their attendants. The birds were all alert and healthy. We did not color-mark them before putting them in the box (a decision later regretted because of the difficulty of reading leg bands through fish-eye viewers). Three of the birds were very vocal when they saw humans, but 70R only turned her head on the side and stared at us. During their week in the hack box they were a quiet group, but all appeared to progress normally until the morning of May 7. There were green mutes and

normally until the morning of May 7. There were green mutes and a greenish casting in the hack box. Bird 42Z, who had been the first to go to sleep the night before, was very subdued and just sat in a corner and did not scream as he usually did when the cage was opened for cleaning. He was removed and given emergency veterinary care (in consultation with Dr. Redig of The Raptor Center), but died the same day. The remaining three birds were paint-marked the afternoon of May 7.

Group II was shipped from The Raptor Center via Northwest Airlines on May 28. We paint-marked them and placed them in the hack box. They were an energetic group, and all progressed normally until May 31, when green mutes were seen in the box. Pat sat and watched until she saw 81R pass another green stool. The bird was removed, and given veterinary and rehabilitation care (in consultation with Dr. Redig of The Raptor Center) until she recovered.

Vega flew Northwest Airlines to La Crosse on June 10. He was a 1991 Des Moines, IA released bird which had been rehabilitated at The Raptor Center. He was paint-marked upon arrival and held in the hack box for two days. He was very active in the box.

Group III arrived on a June 19 flight. The birds were paint-marked and placed in the hack box. They were a very diverse group in their behavior. Most of the males were quite active, pacing and flying at bars and walls. The females spent most of their time in the hide. Because the two females were both larger and younger than the males, they developed more slowly. We decided it would be advisable to split the group to release each bird at an optimal developmental state. The males were repainted June 25 and released June 26. The females were repainted June 27 and released June 28.

Re-release of 43Z This bird from Group I had suffered a broken right coracoid in late May. He made an unexpected and rapid recovery at The Raptor Center and was flown to La Crosse on July 8. He was paint-marked and placed into the hack box for an overnight stay. He was thirsty upon arrival and drank some water, but he ignored the quail. His interest was on how to get out of those bars!

Returnee I and Bonus Bird Bird 70R had been insufficiently wary of humans when she was released. She had been sent off for rehabilitation and was returned to La Crosse on July 16 for re-hacking. The Raptor Center included an "extra" 52-day-old male Peregrine in the shipment! The two birds were put into the hack box in the late afternoon and kept only overnight. The Group I bird was now 112 days old, had been in a flight cage, and was frantic to escape the hack box. The little male cowered as she repeatedly landed on him. The birds were paint-marked early in the morning of the 17th and quickly released.



## 5. RELEASE DETAILS

Release data and first flight information are summarized in Table 2. which is followed by a release narrative for each group.

Table 2. Release dates, ages and flight times for Peregrine Falcons released at La Crosse in 1992. Some times are approximate.

Name	Color Mark	Proj. Band	Release Date	Age at Rel. (days)	Time to First Flight (hr:min)	Time to Return from First Flight (hr:min)
<b>GROUP I</b>						
RIO	RO	71R	05-08-92	42	72:38	1:55
EPHEMERA	BO	70R	05-08-92	42	9:58	(a)
	ROO	70R	07-17-92	112	:30	(b)
WINDWEAVER	LO	43Z	05-08-92	42	22:50	immed.
	LOO	43Z	07-09-92	104	1:21	immed.
<b>GROUP II</b>						
NIGHTFLYER	RG	81R	06-08-92	45	24:07	5:39
SLATE	RP	80R	06-03-92	45	35:26	:43
JONDALAR	LG	54Z	06-03-92	42	<20:43	7:26
ARBOR	LP	55Z	06-03-92	42	0:18	21:52
<b>GROUP III</b>						
MARSH	LGP	88Z	06-26-92	47	1:36	immed.
LOGEY	LOG	92Z	06-26-92	45	8:02	no ret
unnamed	RPP	93Z	06-26-92	44	immed.	9:36
METALLICA	LPP	94Z	06-26-92	42	2:47	immed.
COULEE	ROG	07W	06-28-92	43	>40:35 <48:45	>3:24 <12:34
AYLA	RGP	12W	06-28-92	43	15:37	immed.
<b>OTHER</b>						
VENTURE	LGG	14N	07-17-92	53	1:01	23:00
VEGA (c)	LO	59X	06-12-92	>1 yr.	immed.	88:31

- (a) Bird 70R showed an unusual lack of avoidance of humans, so she was recaptured and retrained before her second release.
- (b) Bird 70R did not return to the site after her re-release.
- (c) Bird 59X had been initially hacked at Des Moines, IA on June 15, 1991. He broke a wing on October 11, 1991 and was rehabilitated at The Raptor Center. He was re-hacked at La Crosse in 1992.



### Release Detail Narratives

Group I The first release of the season was accorded full press coverage. Reporters and camera operators were allowed onto the roof to cover the pre-release events. The Lead Hack Site Attendant wore a clip-on remote microphone to record narration of the release and the sounds in the hack box as the Peregrines were placed into the hide. After the birds were in the hide, the main door to the hack box was tied open with string. The hide door was rigged with another string to allow remote opening so that no humans were in sight when the birds were freed. Two days' supply of quail was tied to hack boards, one of which had torn-open quail and was placed right in front of the hack box door. The hide door was opened at 8:57 AM on a clear, cool, windless morning. Several volunteers were positioned at street level to watch the birds. All 3 Peregrines appeared on the carpeted ledge by 9:15 and spent the day cautiously flapping and making tiny flights on the roof. None chose to fly the first day, but 70R slipped and/or was pushed off the building in the evening.

Group II Part A The three healthy birds in the group were released at 8:45 a.m. on June 3, another perfect summer day with light winds. We set up the remote hide door opening, quail supply and volunteer observers as we had for Group I. One of the male Peregrines flew off almost immediately and did not return until the next morning. The female missed a landing on a short hop-flight along the building ledge and fluttered to a lower roof. By late afternoon she ended up on the ground. We picked her up and slipped her onto the roof out of sight of the third bird. This third bird also landed on a lower roof after his first attempt at flight. He later flew to a nearby building, on which he spent the night.

The remaining female (RO) from Group I was still here. She appeared on City Hall in the early afternoon and was met by begging Group II birds. She seemed surprised by this behavior and jumped off the building as they approached her. By the next morning, she was engaging her new companions in aerial play.

Group II Part B The fourth Group II bird, which had become ill, recovered and was returned to the hack box June 5. She was released June 8, a cloudy, cool, morning with calm winds. We did not use the remote opening method, but just covered the tied-open hack box doorway with a panel which was slid off by a rapidly retreating hack site attendant. The bird flew the next day.

Vega He was placed in the hide and released by the same remote-opening method described for group I. The day was perfect, with mostly sunny skies, a temperature of 74 and winds southeast at 6 mph. He had been quite restless in the box so it was no surprise that he came out of the box and took off flying immediately. He flew directly to a big hackberry tree 2 blocks away.

Group III Males We had decided to divide this group and release the four males on June 26. We have only one hack box, so a large carry kennel was used as a temporary release cage. The four to-be-released birds were transferred to the kennel at 7:30

a.m. and allowed to calm down for 45 minutes. A string was rigged to allow remote opening of the kennel. The morning was a warm 74 degrees with sunny skies and north winds at 10 mph. All four birds flew the first day, one of them never to return.

Despite what we thought were clear and definite agreements regarding roof access by humans, elevator repairmen opened a door leading onto the City Hall roof (one level above the hack box) before all birds had flown. They reported visual contact with a Peregrine. Lissa went up to that door and kept people out of sight of the birds. (The missing bird was seen on City Hall after this incident.)

Group III Females We set up this release before dawn to avoid disturbing the other recently released Peregrines. We went to the hack box at 4:00 a.m. and found the to-be-released birds still in the hide for the night. We closed the hide door, rigged the remote opening string, and opened the hide at 4:55. The morning was a cool 55 and partly cloudy with light wind. Several other Peregrines were on the City Hall roof and on nearby buildings when these two emerged from the hide as the sky brightened. One bird took her first flight that evening, the other waited two more days.

Re-release of 43Z This rehabilitated Group I bird was re-released in our standard manner at 8:44 a.m. July 9 after his overnight stay in the hack box. The morning was a pleasant 75 degrees with partly cloudy skies and a light south wind. The bird ate, rested, and did stationary flapping before taking flight a little over an hour after the box was opened. He flew well the first day, at first making short flights and landing on an antenna. By afternoon he was riding a thermal high into the sky. Slate (80R) was often aggressive toward him, bumping him off the hack board and grabbing at him in flight.

Release of 14N and Re-release of 70R These two birds were paint-marked at 8:30 a.m. and released shortly thereafter. Bird 70R was extremely hard to handle, refusing to settle down at all when held. She broke out of the hide while we painted 14N, so we used the alternate release technique. The door to the hack box was covered by a panel held in place by hand. The main door was tied back and one person left on the roof to hold the panel in place. The person stood out of sight of the hack box door, slid the panel off, and quickly moved to the roof-exit door. Both birds flew that morning, 70R never to return.

## 6. POST-FLEDGING BEHAVIOR

This section will contain only the group synopses. Information about re-releases and birds 59X and 14N will be found in the individual bird evaluation accounts.

Group I All three birds appeared on the building ledge within 20 minutes of release. None chose to fly the first day, but as evening approached we had a deja vu experience as one

Peregrine slipped off the ledge and flew to a tree. (A similar event occurred in the first group of 1991). This bird was not yet ready to fly, but she also was insufficiently wary of humans and so was removed from the site. The other two birds cautiously explored the possibility of flight. They screamed at large birds, such as a crow and Great Blue Herons, that flew near City Hall. The male, 43Z, took his first flight the next morning. The female, 71R, flew when flushed from the roof on the third day. As they perfected their flying skills they engaged in frequent aerial play. The birds roosted together on the City Hall every night until 43Z was injured and sent to The Raptor Center.

Group II The first three birds of this split group were quite active at release, but with varying initial success. One took flight a few minutes after release and did not return until the next day, one had to be carried back to the roof after missing a landing on a short hop-flight, and one made it to an adjacent building after landing on a lower City Hall roof on his first flight. During the first few days they tried to beg food from the Group I female. Only two of these birds roosted on City Hall at night, and then only for a couple days. They spent their nights on adjacent buildings or in trees. They gained flight skills quickly and began aerial play and prey chasing during their first week out. The fourth bird in this group, released 5 days after the others, took flight the day after release. She food-begged from her boxmates. She became part of the group and appeared to progress normally, but left the site prematurely.

Group III One bird from this group left the site for good the day of release. The other 5 progressed rapidly, all but one flying on the day of release. Some tried to beg food from the older birds, often quite aggressively. In less than a week several of these birds were engaging in aerial play, carrying quail off the building and chasing prey. They had frequent chances to interact with other Peregrines; there were ten flying now.

## 7. DEVELOPMENT OF HUNTING BEHAVIOR

Young Peregrines show their interest in potential prey while in the hack box. They watch airplanes, helicopters, insects, down feathers, and of course birds, with intense attention. Often their heads move in unison as they all track the same moving thing. Once out of the box, this interest in watching birds continues and becomes an interest in chasing birds. For the ten Peregrines which progressed normally, the mean age at which they began chasing prey was 53 days (n=10, range: 49-61). Males began earlier at an average age of 51 days (n=6, range: 49-55). Females averaged 56 days of age when they began to chase (n=4, range: 50-61).

At first the Peregrines chased anything that flew, including Great Blue Herons. They often screamed at the big herons, so

their interest in them is probably defensive. Common birds at the hack site were Rock Doves, European Starlings, Common Grackles, American Robins, House Sparrows, House Finches, Chimney Swifts, Purple Martins, and Nighthawks. All were tail-chased or swooped at by the young Peregrines. Nearby marshes and bottomland forests provided additional prey, such as Green-backed Herons, ducks, and cuckoos. We had less direct evidence of successful hunting this year than last. The birds did not spend as much time near the hack site nor did they bring their prey back to City Hall to eat. And, because they did not roost on the building, they did not leave many castings there either. The most frequently found prey remains were from Yellow-billed Cuckoos presumably caught by one-year-old Vega. Remains of Robins and Rock Doves were also identified. On several occasions we saw the Peregrines pursue, capture and eat bats.

## 8. UNUSUAL INCIDENTS

Interactions with Other Birds Wild Peregrine sightings occurred on seven different days between May 10 and July 27. The May 10 sighting was brief. The bird made a high direct flight past City Hall and did not interact with the released birds. The other six observations clustered in three short periods: June 21 and 22, July 10 and 12, and July 25 and 27. The bird seen during the latter six sightings appeared from size and plumage to be a male of at least one year. No bands were visible, but distance and speed would have made seeing a band unlikely.

Although there could have been more than one bird seen during those six days, it appeared to be a single bird and will be referred to as such. The plumage was similar each time and on the days when the sightings occurred in close sequence, the molt pattern was consistent.

The behavior of the wild bird in relation to the released birds ranged from mildly interactive to aggressive. He was seen soaring alone, soaring with a female, flying at a low level with a female (RP), tail-chasing a frightened-sounding released bird, diving repeatedly on a female perched on City Hall (ROG), and chasing and stooping several times on one of the males (LPP). After RP flew with the wild bird, she landed on the Cathedral. He then performed a series of V-flights past the Cathedral. The V-flight consisted of a steep stoop with immediate ascent of equal height.

On several occasions when the wild bird was in the area, Vega, the one-year-old re-released male, was seen to bow, pump his wings and vocalize using a double-syllable descending call.

City Hall is on a flight path between a heronry and a large marsh. Great Blue Herons fly by frequently. Newly released Peregrines scream at them and sometimes give chase. Two of our volunteer observers reported seeing a Peregrine strike one of the Herons.



Two soaring Peregrines were joined high in the sky by a buteo one afternoon. The male Peregrine crabbed at the hawk, either in play or aggression.

One of our large females chased a small flock of American Crows, singled one out, chased it and grabbed at it with outstretched talons. She gave up after a while, and the crows retired to trees to complain loudly.

As the Peregrines dispersed, American Crows visited the area and ate up quail and prey remains the Peregrines had abandoned on roofs. The Peregrines were usually absent when the crows appeared. When the two species did interact it was limited to vocalizations.

Accidents On a very windy May day, two weeks after release, 43Z was found on the ground unable to fly. He was flown to The Raptor Center the next day and diagnosed with a right coracoid fracture. The fracture was surgically repaired (pinned), but prognosis was uncertain. The bird made a remarkable recovery and was re-hacked in La Crosse July 9.

On July 22, 93Z was found dead along a highway just a few miles from the hack site. It is assumed he collided with a vehicle or power line. Post-mortem examination to determine cause of death will be done at the NWHL in Madison.

On July 20, only three days after release, 14N flew hard into a street-level plate glass window in downtown La Crosse, breaking right radius and ulna. He was flown to The Raptor Center the next day and is recovering as of this writing. Several days after the injury, a member of the public reported that a Peregrine had struck a window at WWTC earlier in the day on July 20.

Illnesses Bird 42Z had been progressing normally in the hack box until the day before release. There were green mutes, indicating the possibility that a bird was not eating. This bird was lethargic. Pat Skewes called Dr. Redig at The Raptor Center and obtained permission to remove the bird and take it to Dr. Laura Johnson, a La Crosse avian veterinarian. A blood test was done, the bird was given fluids, started on Tribissen and hand fed bits of quail. The bird died the same day. Post-mortem examination at The Raptor Center disclosed a developmental abnormality of the heart.

Bird 81R, while still in the hack box, passed green mutes. She too was treated by Dr. Johnson in consultation with Dr. Redig. The bird was given Tribissen and Flagyl and hand-fed until she began to eat on her own. The bird was housed in one of Great River Wildlife Center's 8'X16' flight cages to which a pea gravel covered shelf had been added just for her. At the end of the treatment course she was eating well and had regained normal weight. She was returned to the hack box and hacked out to join the rest of her group. She flew and progressed normally for

several days then disappeared. The morning of the last day she was seen, watery green mites were found near the hack board where she had been feeding.

Insects Hornets again discovered the quail on the hack boards and became very numerous by the end of July. Cleanup became a very cautious job! Peregrines often shook their heads as if annoyed by the insects, but we witnessed no stings this year.

## 9. EVALUATION OF INDIVIDUAL BIRDS

It was decided to name the birds this year. However, in our daily observations and field notes we used the color mark as identifier.

RIO (71R/RO) was gaining in flight expertise on her own and in aerial play with her boxmate Windweaver (43Z) when he had his accident. She did not return to City Hall to roost the night he was found. Rio was the only Peregrine flying until Group II was released. A few times she sat high on the City Hall and called, presumably trying to reunite with her group. Her development seemed to plateau while alone; she flew little and ate much. She is a solid and calm bird. She remained dependent on the quail supply for three months and roosted on City Hall at night for most of that time.

EPHEMERA (70R/ROO) exhibited unusual behavior from the moment we first saw her at The Raptor Center. Instead of screaming at the sight of humans, she just turned her head on its side and looked intently at us. The behavior persisted in the hack box, but only revealed itself as a problem once she was released. When she landed on the ground, she did not retreat from approaching people, but even walked toward them. On the morning she stood on their picnic table and greeted the La Crosse police force as they came in to work, we removed her from the release site! Charlene and Pat consulted with The Raptor Center and reached an agreement on sending the bird back to them. TRC sent Ephemera to a breeding facility to readjust her attitude. When she was returned to La Crosse two months later, she was a very wild and hard to handle bird. After re-release she flew expertly, but did not ever return to the site.

WINDWEAVER (43Z/LOO) became a fast and expert flyer early in his career. He learned to ring up on thermals, to glide and do folded-wing drops within his first week on the wing. Alas, after two weeks of flying he suffered a broken right coracoid and was grounded at The Raptor Center. He made a surprisingly fast recovery was again perfecting his flying skills over La Crosse less than two months later. When he last visited the hack site in mid-August he was flying fast and well with no evidence of his injury. He was seen hunting on the edge of Lake Onalaska on August 18.

NIGHTFLYER (81R/RG) became ill with a probable intestinal



infection while still in the hack box. She appeared to achieve a full recovery and was released. She was progressing well, although showing an unusual restlessness and desire to fly at night. The morning of her fifth day out she had been feeding on the hack board just before Pat went up for rooftop cleanup and feeding. There were fresh watery green mutes near the hack board that morning so it seems possible that the bird became ill again. She flew off that evening and was not seen again, certainly a premature departure.

SLATE (80R/RP), a large dark gray female, developed into the dominant bird of 1992. She was often aggressive toward other Peregrines eating at the hack board and showed an extreme intolerance toward Vega (59X) and Windweaver(43Z). She flew strongly and developed folded-wing drops and prey pursuit rapidly. During her last week at the site she cut a crow out of a flock, pursued it and grabbed it with outstretched taloned feet! She is one of the birds that flew with the wild male. She is an excellent Peregrine.

JONDALAR (54Z/LG) developed rapidly and smoothly. He perfected his flight skills and frequently engaged in aerial play during his first week out. He learned to perch on antennas the day after release and carried quail during the first week. He was sighted at the National Wildlife Fisheries Research Laboratory near Lake Onalaska feeding on prey 4 weeks after release. His departure from the site followed an ideal pattern of several days of absence followed by return visits to the hack site. He is a fit bird.

ARBOR (55Z/LP)) was named for his habit of spending the night in trees. He was the most active of Group II. An independent bird, he did not return from his first flight until the next day and never roosted on City Hall. Like his brother Jondalar, he developed flight skills smoothly and rapidly. He left the hack site at the same time Jondalar stayed away the first time, but he did not return. He is another strong and fit peregrine.

MARSH (88Z/LGP) was the oldest and one of the most active birds in Group III and he continued to progress rapidly once released at 47 days of age. He flew frequently without apparent fatigue on his first day. By his second day on the wing he stayed away from the hack site for hours at a time, and on the third day he was carrying quail, dogfighting and showing aggression toward other Peregrines. He was chasing prey the day before he left for good just 9 days after release. Although his departure was premature by usual standards, he was developing his skills so rapidly that we have some assurance he was able to thrive.

LOGEY (LOG/92Z) was a small bird, free of down and second oldest in his group. He was alert but unusually quiet in the hack box, seldom vocalized, only occasionally flapped or flew at the bars. He took his first flight on the afternoon of the day of release and never returned from that premature departure.

unnamed (RPP/93Z) was the other extremely active bird in

Group III, frequently flying at the bars and walls of the hack box. He flew immediately upon release and continued to progress rapidly. He appeared to be developing into a very competent Peregrine, but was found dead along an area highway. We assume he collided with a power line or vehicle. The carcass will be sent to NWHL in Madison for post-mortem examination.

METALLICA (LPP/94Z) is a sibling of 93Z. He flew on the morning of release and progressed rapidly in flying and prey pursuit skills. His response to nearly every interaction with other Peregrines was loud vocalization, hence the name. At the hack board he interrupted feeding to scream and even screamed while eating. He carried quail early and stooped on small birds at about 10 days out of the box. His departure from the site began with a two day absence followed by a two day return before the complete absence. He is a strong and competent bird.

COULEE (ROG/07W) is a large female whose development was sure and steady if slow and unremarkable. She flew well, had chased prey and carried quail by the time she left the site at 88 days of age. She is a solid and competent bird.

AYLA (RGP/12W) is a sibling of 07W who hatched the same day but developed faster once out of the box. She showed the same steady and solid progress but achieved each milestone at an earlier age. She flew on the day of release and was making stoops on small prey birds when one week out of the box. She left the site one month after release at only 71 days of age, but had already given evidence of excellent skills.

VENTURE (LGG/14N) is a small male who came to La Crosse at 52 days of age after a hard-won recovery from coccidiosis at The Raptor Center. He was released at 53 days and was still making only short flights between buildings when he broke his right radius and ulna in an attempt to enter a muffler shop through a plate glass window. He is recovering at The Raptor Center.

VEGA (LO/59X) is a rehabilitated Peregrine first released in Des Moines in 1991 and re-hacked with the 1992 La Crosse birds. He flew immediately upon release and scared us by disappearing for 3-4 days. When he did return he was harassed and driven off the hack boards by the other birds, Slate (80R) in particular. He nevertheless stayed in the area and made his first known kill two weeks later. He has molted into a beautiful light-breasted adult. He continued to feed at the hack board until mid-August when the other Peregrines had all left the site. When the wild Peregrine visited the site, he alone reacted to it with what appeared to be territorial vocalizations. Vega has remained in the area; sightings are continuing as of this update writing in October. He can be seen perching and eating prey on the ledges of the Cathedral steeple and on the large lighted letters on First Bank Place. His flight is strong and fast.

General comments Similarly to what we observed in 1991, we had some early cause for concern about several birds.

Three of these "concern" birds dispersed prematurely in 1992. Ephemera (70R) had not shown normal avoidance of humans

and had required rehabilitation; Nightflyer (81R) had been removed from the box and treated for an intestinal ailment; Logey (92Z) had been unusually quiet and inactive in the hack box.

One of the injured birds (14N) had been sick before he came here. However, the other injured bird, Windweaver (43Z) and the accidental death (93Z) had progressed normally.

#### 10. DISPERSAL

As can be seen in Table 3, ages of dispersal varied widely. Most birds which left the site after two or more weeks were gone for short periods before finally leaving. We made bar charts to record whether we saw a bird each day.

Table 3. Dispersal data for Peregrine falcons released at La Crosse in 1992

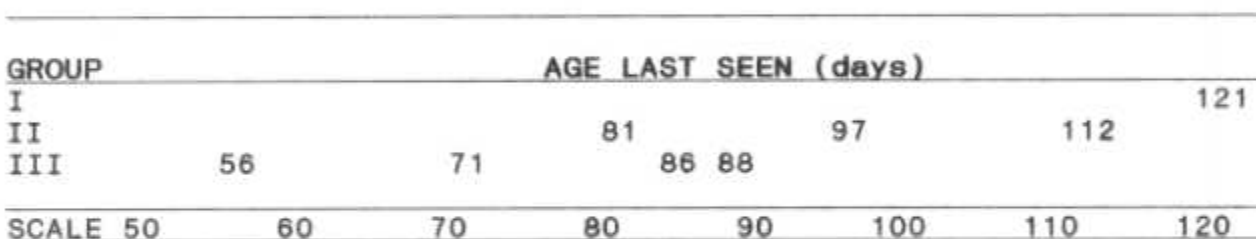
Name	Sex	Color Marks	Project Band	Age Last Seen	Date Last Seen	Notes
<b>GROUP I</b>						
RIO	F	RO	71R	121	07-28-92	
EPHEMERA	F	ROO	70R	112	07-17-92	Re-release
WINDWEAVER	M	LOO	43Z	141	08-15-92	Re-release
<b>GROUP II</b>						
NIGHTFLYER	F	RG	81R	49	06-12-92	
SLATE	F	RP	80R	112	08-09-92	
JONDALAR	M	LG	54Z	97	07-28-92	
ARBOR	M	LP	55Z	81	07-12-92	
<b>GROUP III</b>						
MARSH	M	LGP	88Z	56	07-05-92	
LOGEY	M	LOG	92Z	45	06-26-92	
unnamed	M	RPP	93Z	69	07-21-92	Dead
METALLICA	M	LPP	94Z	86	08-09-92	
COULEE	F	ROG	07W	88	08-12-92	
AYLA	F	RGP	12W	71	07-26-92	
<b>OTHER</b>						
VENTURE	M	LGG	14N	56	07-20-92	In rehab.
VEGA	M	LO	59X	>1 yr.	Still in area	

It is interesting to note that two "pairs" of birds were last seen the same day. In each case, an older female left on the same date a younger male did. Rio (71R) and Jondalar (54Z) left on July 28. Slate (80R) and Metallica (94Z) were last seen August 9. Also, Nightflyer (81R) was last seen the day newly-released Vega (59X) disappeared for 4 days. On each of these three dates the wind patterns were similar. Winds from a

southerly direction veered into the northwest or north. This wind shift, of course, is a common one and also occurred many times that Peregrines did not leave!

Of the 8 birds which went through the hack sequence normally (i.e. did not disperse prematurely and were not injured) females remained longer at the hack site. Overall mean dispersal age was 89 days (n=8). For females the mean was 98 (n=4, range: 71-121). For males the mean age last seen was 80 (n=4, range: 56-97). There was also a trend toward earlier dispersal as the project continued through the summer (Figure 1). Group I stayed longer than Group II which in turn stayed longer than Group III.

Figure 1. Dispersal ages of Peregrine Falcons illustrating trend toward earlier dispersal of later-hacked birds



Full time observations were continued throughout the project until August 8 (Lissa's last day). For two weeks before that date Pat had been charting time of day of Peregrine visits and so was able to focus her observation efforts on the most productive time periods. Daily feeding was continued until August 13 when tapering off began. At first, quail were removed during the middle of the day so that food availability and observation periods coincided. After no quail had been eaten for 5 days, the food was provided only every other day for the next week and observations limited to a few hours per day. Feeding was terminated on August 29. Only Vega, now molted into adult plumage, visited the hack board after August 15.

#### 11. PUBLIC RESPONSE

This second year began with the same intensity of media coverage we enjoyed in 1991, but as the summer progressed and no novel events occurred, the media became less interested. We informed them of each Peregrine arrival, release and problem by telephone. We had several TV stories and interviews, several newspaper articles (two with small photos), and frequent radio coverage. At the end of the summer, a written press release summarizing the project was mailed to TV, radio, and newspaper.

Public response was again positive and interested. Our ground-level observation posts kept us available to the public all day. When people stepped up to ask questions (ranging from, "How are they doing today?" to "What are you doing here every day?") we briefly explained the recovery effort, let them view



the birds through scopes and binoculars and gave them a copy of WDNR's four-page "Peregrine Falcon Life Tracks" brochure.

We again placed an informational display in the lobby of the City Hall. It had attractive Peregrine photos and written material on history, ecology, and restoration of Peregrines. One side of the free-standing display board focused on the statewide Wisconsin effort, the other on La Crosse. Material was changed and updated frequently. A literature pocket provided copies of "Life Tracks," "Peregrine Panorama" and "Falcon Flyer" for people to take. We also wrote a daily "Update" and posted it on the display.

Our volunteer Peregrine artist drew another striking T-shirt design. This year's shirts were sold statewide to benefit the Bureau of Endangered Resources.

The Peregrine reintroduction also had the dubious experience of being the trigger for a debate on the value of predators (especially avian predators) in the letters to the editor in the Tribune sports section!

Every day brought calls from the public reporting sightings of Peregrines (or what were thought to be Peregrines). Pat talked to each of these people to help them determine if the bird they saw was truly a Peregrine. Most were Kestrels and Nighthawks. One of the newspaper articles concerned a nighthawk that was mistaken for a Peregrine! This year also produced several calls from rather angry people who had seen or suspected avian predation on songbirds. Some threatened violence to the hawks. I tried to bring the callers to some understanding and appreciation of the existence of predators and of bird protection laws as well.

Volunteers assisted with daily observations, especially during releases. However, fewer volunteers came forward, and several 1991 stalwarts were unable to put in as much time this year. Each volunteer was provided with a clipboard to hold his or her their instruction sheet, observation report sheet and brochures to hand out to the public. (Samples of all forms are included in the appendix.)

## 12. SUGGESTIONS AND RECOMMENDATIONS

The site and procedures worked well. The City Hall and its location provided a good place for Peregrines to launch into the world. Most of last year's suggestions for improvement were adopted, although we never got anyone to donate a video camera. The addition of one would be valuable for monitoring the birds in hack or nest box and for public education.

We have released 30 Peregrines in La Crosse, our rehabilitated male is still here, and a wild adult was seen here several times during this release season. It is an optimal time to put up a nest box! The City Hall appears to be a good location for the box for the same reasons that make it a good release site. In addition, members of the public are accustomed to "their" Peregrines in the area and are likely to respond

positively to nesting birds in the same location. The City of La Crosse has been very cooperative both years.

### 13. ACKNOWLEDGEMENTS

Supporting Agency The La Crosse Peregrine release Project is an activity of the Wisconsin DNR Bureau of Endangered Resources. It was coordinated by Nongame Biologist Charlene Gieck. Charlie also put in days of work at the site when releases began a month earlier than originally planned.

The La Crosse Area office of the DNR provided frequent and essential support. Although we did not have offices there, we were made welcome and given all the help we needed. Quail were kept in the basement in the Peregrine Project-Wildlife freezer. Office supplies and copy machine were available. The office staff, Paula, Carol, Angie and Theresa relayed phone calls and helped us with many details (including running that copy machine). Wildlife managers and technicians helped by doing everything from putting up the hackbox to observing at the hack site. Thanks to John O., John N., Ken, Roger, Dave, Bobbie, Megan, Jason, Dan, and Glen.

Cooperators and Volunteers We thank all the following organizations, companies, and individuals who gave materials, time, expertise and good will to get another group of Peregrine Falcons flying in La Crosse.

The City of La Crosse  
 The Common Council  
 Mayor Zielke  
 O'Nieta Thorsen  
 The Department of Public Works  
 Bob Schroeder  
 Pat Caffrey  
 Patti Bartz  
 Maintenance staff  
 Police Department  
 Chief Bruce Marco  
 Captain Gordon Rieber  
 The Raptor Center  
 Dr. Patrick Redig  
 Dr. Roberto Aguilar  
 Lee Bass  
 Lori Mueller  
 Hillside Animal Hospital  
 Dr. Laura Johnson  
 Dr. Robert Spencer  
 Great River Wildlife Center  
 Coulee Region Humane Society  
 Western Wisconsin Technical College  
 Jack Jansky  
 Dairyland Power Coop



Midas Muffler Shop  
National Weather Service

The Volunteers

Dick Ash  
Megan Coulombe  
Jim Fischer  
Michael Furr  
Katrina Gustafson  
George Hammond  
Penny Hayes  
Fred Leshner  
Roger Loing  
David Olson  
Pat Ostrander  
Jean Ruhser  
Jennie Sauer  
Elizabeth Skewes  
Jason Skewes  
Mark Terry  
Robbie Ward

Tim Collins  
Donna Crader  
Bill Fleming  
Meagan Graney  
Chris Haakerstad  
Dave Hayes  
Jack Johnson  
Barbara Link  
Tom Neefe  
Lyle Ostrander  
Tina Roppo  
Kim Sakis  
Katie Serres  
Glen Skewes  
Mary Temp  
Rae Thelen  
Elizabeth Yanke

## APPENDIX A

Appendix A contains annotated examples of the forms developed and used in the 1992 La Crosse Peregrine Release Project. The shaded box added to each form describes the form and how it is used. Forms were created on WordPerfect 5.1.

The forms are:

IDENTIFICATION RECORDS TABLE  
INDIVIDUAL PEREGRINE RECORD FORM  
OBSERVATION FORM FOR PEREGRINES IN HACK BOX  
HACK SITE ATTENDANT OBSERVATION FORM  
UPDATE FORM  
VOLUNTEER SCHEDULE FORM  
VOLUNTEER INSTRUCTIONS  
VOLUNTEER OBSERVATION REPORT FORM  
PASSERBY PEREGRINE OBSERVATION REPORT

[illegible]

# INDIVIDUAL BIRD RECORD FORM

LA CROSSE PEREGRINE FALCON RELEASE PROJECT 1992

COLOR	SEX	PROJ BAND	USFWS BAND	BRDR BAND

SUBSPECIES:	BREEDER:

MILESTONES		
EVENT	DATE	AGE
HATCH		
INTO HACK BOX		
RELEASE		
FIRST FLIGHT		
SOAR		
GLIDE		
FOLDED-WING DROP		
AERIAL PLAY (RESPONDER)		
AERIAL PLAY (INITIATOR)		
FOLLOW/CHASE PREY		
STOOP ON PREY		
CARRY QUAIL		
CARRY OTHER		
ROOST OFF CITY HALL		
LAST SEEN		

NOTES \_\_\_\_\_

## INDIVIDUAL PEREGRINE RECORD FORM

This form provides a concise profile for each Peregrine. It includes all identification numbers and marks, subspecies, and dates of significant events in the bird's development.

# PEREGRINE FALCON IN-HACK-BOX OBSERVATIONS

DATE \_\_\_/\_\_\_/\_\_\_ TIME: START \_\_\_\_\_ END \_\_\_\_\_ GROUP \_\_\_\_\_

WEATHER CONDITIONS: TEMP \_\_\_\_\_ WIND \_\_\_\_\_ SKY \_\_\_\_\_

OBSERVATIONS	BIRD					
OVERALL IMPRESSION OF THE BIRD						
PLUMAGE CONDITION						
ACTIVITIES						
FEEDING						
DRINKING						
DEFECATING						
CASTING						
PREENING						
BATHING						
SLEEPING						
VOCALIZING						
INTO HIDE						
OUT OF HIDE						
STATIONARY FLAP						
FLY AT BARS						
FLY AT WALL						
PERCH TAKING						
BITING						

ADDITIONAL NOTES \_\_\_\_\_

OBSERVATION FORM FOR PEREGRINES IN HACK BOX This is a chart designed for recording the activities of several active birds at once.

OBSERVER \_\_\_\_\_

# PEREGRINE FALCON OBSERVATION REPORT

OBSERVER \_\_\_\_\_ DATE \_\_\_\_\_

BIRDS SEEN: \_\_\_\_\_

_____ RO	_____ LG	_____ LPP
_____ LO-II		_____ RG
	_____ LP	_____ LOG
_____ LOO	_____ RP	_____ ROG
		_____ RGP
		_____ LGP
		_____ ROO

---

WEATHER COND. \_\_\_\_\_ TIME \_\_\_\_\_ TEMP \_\_\_\_\_ WIND \_\_\_\_\_ SKY \_\_\_\_\_

ACTIVITY LEVELS OF BIRDS: \_\_\_\_\_ # NOT YET FLOWN OFF BUILDING

\_\_\_\_\_ # EARLY FLIERS/SHORT FLIGHTS

\_\_\_\_\_ # LONG-FLIGHT FLIERS

FEEDING: QUAIL LEFTOVER: \_\_\_\_\_ / \_\_\_\_\_ NUMBER OF QUAIL FED: \_\_\_\_\_

EXTENT OF FEEDING ON QUAIL \_\_\_\_\_

CASTINGS? (DESCRIBE) \_\_\_\_\_

MUTES? (DESCRIBE) \_\_\_\_\_

PREY REMAINS? \_\_\_\_\_

WATER: EVIDENCE OF USE? \_\_\_\_\_ CHANGED? \_\_\_\_\_

TIME	BIRD	ACTIVITY AND LOCATION
------	------	-----------------------

## HACK SITE ATTENDANT OBSERVATION REPORT FORM

This is a three-part form similar to the Volunteer Observation Report Form.

Section 1 is the birds-seen checklist.

Section 2 facilitates recording of weather conditions and detailed Peregrine care data.

Section 3 provides an area for recording the running account of Peregrine activity.



LA CROSSE  
PEREGRINE FALCON  
UPDATE

UPDATE FORM

This attractive form is used to write out a daily report on the status of the project and the individual birds. It often includes upcoming events and interesting anecdotes about the birds. Updates are posted on the Peregrine Project informational display in the City Hall lobby.



PEREGRINE FALCON PROJECT  
LA CROSSE, WISCONSIN

1992

TIME	VOLUNTEERS	P	L
6:00 TO 8:00 A.M.			
8:00 TO 10:00 A.M.			
10:00 A.M TO 12:00 NOON			
12:00 NOON TO 2:00 P.M.			
2:00 P.M. TO 4:00 P.M.			
4:00 P.M. TO 6:00 P.M.			
6:00 P.M. TO 8:00 P.M.			

SPECIAL INFORMATION FOR THE DAY:

#### VOLUNTEER SCHEDULE FORM

This form is used for volunteer sign-ups. It also includes bars along the right for the work schedule of the Hack Site Attendants and has space at the bottom for special information for the day. A looseleaf notebook contained one of these for each day of the project.

LA CROSSE PEREGRINE FALCON RELEASE 1992 VOLUNTEER SCHEDULE

PEFREL92\VOLSCHED.FRM

**VOLUNTEER INSTRUCTIONS** This sheet gives a volunteer a written copy of the information they received verbally in their first observation session. Sample observation records are included.

LA CROSSE PEREGRINE FALCON RELEASE 1992  
VOLUNTEER INSTRUCTIONS

WELCOME TO THE SECOND YEAR OF PEREGRINE RELEASES!

Volunteers are an essential part of the success of the project. Your observations help ensure that the Peregrines are carefully monitored.

A two-part observation form is provided on this clipboard. The top part is a checklist of the birds we have flying at the time of your observation. Please put a check mark next to the birds you have positively identified.

The second part of the form is an activity log for the Peregrines you observe. When you sight a Peregrine, determine which bird it is and what it is doing. Note the time and enter the information on the form. For example, if you see a bird with an orange mark on its left wing eating something on the east ledge of the city Hall at 9:10 A.M., you would enter the information as in the example in the first line below. If, ten minutes later, you see a Peregrine you can't identify fly in and land on the north ledge, you would write something similar to the second line below. Keep watching that bird and you may see its color marks.

TIME	BIRD	ACTIVITY AND LOCATION
9:10 am	LO	Eating something on east ledge of City Hall
9:20	??	Flew in, landed on N ledge, City Hall

When a Peregrine flies, try to find where it lands and record the information.

People passing by will ask you what you are doing. Please describe the project to them and offer them the chance to look at the falcons through scope or binoculars. Your clipboard contains several copies of the Peregrine "Life Tracks." Please take one for yourself and offer the others to interested passersby.

At the end of your shift, please bring the clipboard back to the Hack Site Attendants. If you can also sign up for your next shift at that time it will save a lot of phoning.

Rest rooms and telephones are available in the City Hall lobby, in the entrance to the Police Station, and at Burger King.

Thank you for helping with the restoration of Peregrine Falcons!

Pat Skewes, Lead Hack Site Attendant 788-4898  
Melissa Grover, Assistant 782-3902

## PEREGRINE FALCON OBSERVATION REPORT

OBSERVER \_\_\_\_\_ DATE \_\_\_\_\_

BIRDS SEEN:      \_\_\_\_\_ RO\*      \_\_\_\_\_ LG      \_\_\_\_\_ LPP      MISSING  
                          \_\_\_\_\_ LO-II      \_\_\_\_\_ LP\*      \_\_\_\_\_ RG  
                          \_\_\_\_\_ LOO      \_\_\_\_\_ RP\*      \_\_\_\_\_ ROG      \_\_\_\_\_ LOG  
                          \_\_\_\_\_ RGP      \_\_\_\_\_ LGP  
                          \_\_\_\_\_ ROO

\* Indicates mark is hard to see or confusing; ask Pat or Lissa.

TIME	BIRD	ACTIVITY AND LOCATION
------	------	-----------------------

### VOLUNTEER OBSERVATION REPORT FORM

This is a two-part form for recording Peregrine observations.  
 Part 1 is a checklist of Peregrines seen during the observer's shift. As the population changes, the form is revised.  
 Part 2 provides the space for recording the running account of Peregrine activity.

PEREGRINE FALCON OBSERVATION REPORT

<u>DATE</u>	<u>TIME</u>	<u>OBSERVATION</u>	<u>OBSERVER NAME AND PHONE NUMBER</u>
-------------	-------------	--------------------	---

PASSERBY'S PEREGRINE OBSERVATION REPORT

Copies of this form were kept on a picnic table in a park across the street from the release site. Both casual passersby and "off-duty" volunteers used the form to record sightings of Peregrines.

# **THE LAKEFRONT REPORT**

## **1992 PEREGRINE FALCON NEST AND RELEASE SITES SHEBOYGAN, MILWAUKEE, RACINE AND KENOSHA**

Compiled and Edited by Project Coordinators  
Greg Septon, Milwaukee Public Museum  
and  
Jim Marks, Wisconsin Peregrine Society  
Copyright 1992



**The 1992 Lakefront Report**  
**Sheboygan, Milwaukee, Racine and Kenosha Sites**

1992 has seen the greatest effort ever undertaken to establish a breeding population of peregrines along the western shore of Lake Michigan. During 1991-92 the Wisconsin Peregrine Society undertook the task of coordinating the installation of nest boxes on every tall structure along the western shore of Lake Michigan. With the support and financial assistance of business and industry, eight nest boxes are now up along the lakefront and **Phase II of The Lakefront Plan** was initiated and carried out.

Milwaukee once again topped the state with four young produced at the First Wisconsin Center nest site. The greatest excitement of the year however was our new nest site at the WP&L Edgewater Power Plant in Sheboygan. Less than a year after the nest box was installed at the plant, a pair of adult peregrines moved in and raised two young. This was the first success for **The Lakefront Plan** and a sign of things to come.

**Phase II of The Lakefront Plan** called for the release of a large number of captive produced young along the lakefront and this was accomplished in Racine and Kenosha. Through the generosity and commitment of Racine County, Wisconsin Energy Foundation, Wisconsin Electric Power Company, Versatek and numerous additional donors, 25 young falcons have been successfully released; 10 in Racine and 15 in Kenosha, all of which have survived!

As will be seen in the following site reports we've had an incredibly high success rate this year. With 25 captive produced young released in Racine and Kenosha and another six wild produced young at our two nest sites, a total of 31 young peregrines have fledged along the lakefront this year. **With the loss of only one young we've had a 96.2% success rate along the lakefront!** This is in large part because of the five dedicated individuals who manned our four sites this summer and responded to problems in a timely and efficient manner. If not for their commitment to this project and their finely tuned response times, we would have lost 6-7 young. I'd like to also express my sincere gratitude once again to the Society of Tympanuchus Cupido Pinnatus Ltd. for making the funds available to staff the lakefront project. This made all the difference in our ability to be two, three and yes, four places at once.

## **WISCONSIN PEREGRINE FALCON RECOVERY PROGRAM 1992 SHEBOYGAN, WP&L EDGEWATER NEST SITE**

Jim B. Marks, Project Coordinator  
Wisconsin Peregrine Society, P.O. Box 1148, Milwaukee WI 53201.

### **SITE DESCRIPTION**

Wisconsin's newest Peregrine Falcon (*Falco peregrinus*) eyrie is located at Wisconsin Power and Light Company's Edgewater Power Plant in Sheboygan, Wisconsin. The plant is situated on the shore of Lake Michigan in southeastern Sheboygan. The nest box was installed on the southeast corner of the main plant's roof (elevation 250 ft.) in March of 1991. Built by WP&L employees, the WPS Nest Box design has the elevated deck on the front to keep the chicks safely confined to the rear of the box until they are steady on their feet, at about three weeks of age.

The plant complex has many conveyors, elevators, and smaller buildings in addition to the main building. Also, there are two smokestacks; one south of the main building, and one north of it. A third "short stack," is directly east of the main building below the nest box. All three stacks are commonly used perches by the Peregrines.

### **NESTING ACTIVITY**

Employees started noticing "large falcons" in the coal yard south of the main building in late March, almost exactly one year after the box was installed, three Peregrines, two adults and one immature, were identified by employees in late March. The two adults exhibited a tighter bond, and eventually the boisterous immature abandoned the site.

Reports of the falcons capturing pigeons and displaying courtship behavior prompted Greg Septon and I to visit the site on 10 April. Very strong northeast winds with combination snow/rain hampered locating the falcons that day. However, upon inspecting the nest box we discovered a substantial amount of castings at least one or more months old. Soon after our visit, Executive Secretary Jo Ann Thiel

witnessed two adult Peregrines mating on a light pole west of the main complex.

On 28 April, Charlie Gieck of the Wisconsin Department of Natural Resources (WDNR) visited the nest box and found that one egg had been laid. Eight days later on 6 May, Greg visited the nest box and found a full clutch of four eggs. Both adults were observed and bands were seen on the adult female. Expected hatch date was 3 or 4 June.

During incubation, employees collected prey remains that dropped below the nest box onto a roof. The majority were passerines, but a Green-Winged Teal (*Anas crecca*) and a Forster's Tern (*Sterna forsteri*) were also noted among the remains.

On 5 June, Dr. Alexander Sorokin, Greg and myself visited Edgewater on what we figured to be the 32nd day since incubation began. Upon inspecting the box, Greg found all four eggs still unhatched. The adult female remained in the box long enough for Greg to read her band number. She has a Midwest Peregrine Falcon Restoration Project (MPFRP) band on her left leg with the number 42V. Using previous MPFRP reports, we found that her name is Silverstreak and she was hacked from Illinois Beach State Park in 1989.

Concerned about the fertility of the eggs, we made tentative arrangements to supplement the nest with two chicks if the eggs remained unhatched by 9 or 10 June.

On 8 June, Greg visited the box once again and discovered two out of four eggs had hatched, probably on 6 or 7 June. One more visit by Greg was made on 10 June and two eggs remained unhatched. Plans to collect the unhatched eggs were made for the next visit to the site.

On 22 June, Greg and I went to Sheboygan to collect the unhatched eggs. Upon opening the nest box we discovered one of the chicks missing and one of the eggs also gone. The remaining egg was collected and brought back to the museum to be prepared for the museum's collection. Arrangements were immediately made to supplement the nest with a captive produced young.

On 24 June, we received a young male that was hatched on 9 June from Bob Anderson's project. It was immediately driven to

Sheboygan that day and placed in the box. The parents readily accepted the new addition.

On 2 July, Greg and I met Plant Manager Ken Koele, Jo Ann Thiel, and Barry Ginter of the Sheboygan Press for banding and bleeding of the two chicks. The female received MPFRP band number 17W on her right leg and a USFWS band on her left leg. After banding, blood was drawn from her right brachial artery. Because of the large size of the immature male's legs, he received a larger MPFRP band, number 15W. Again, a USFWS band was applied to his left leg and a blood sample was drawn.

On 8 July, a contest sponsored by the Milwaukee Public Museum and the Sheboygan Press was judged to name the two immatures. Judging the contest were Greg, Wendy Christensen-Senk, Barry Ginter and myself. Winners were announced the next day in the Sheboygan Press. The names selected were Camille for 17W, and Sterling for 15W.

#### FLEDGING

On 17 July, approximately 39 days after hatching, 17W was discovered by plant employee Tim Winkel on a road between the lake and main building at around 1800 hr. He informed Shift Supervisor Pete Wirth who stood guard over her until Greg arrived at about 1900 hr. She was easily captured and examined for any outward signs of injury. She appeared fine and was promptly returned to the nest box. When placed back into the box, 15W, took off and made a shaky landing on a conveyor roof about 35 yards east of the nest box. 15W spent the evening on the roof and 17W remained in the nest box.

The next afternoon, coal yard employees Jerry Schoenemann and Cheri Lubach discovered 15W on the ground along a fence on the east side of the property. He was covered with some coal dust and was wet. The employees captured him easily, wiped him down and promptly returned him to a roof below the nest box. The adult female was nearby when they placed him on the roof, and soon took a perch in close proximity.

On 20 July, 15W was seen flying with both adults in the morning, doing quite well. 17W refledged at 1620 hr, and made a good landing on a support beam for a conveyor. Strong updrafts coming

off the main building seemed to aid in the quick development of flight skills as well as tail chasing by both parents (especially the adult female).

On 21 July, the adult male perched nearby my observation point on the road east of the main building. After approximately four hours of constant observation, I was able to read his MPFRP band number 70T on his left leg. His name is Max and he was hacked from Madison, Wisconsin in 1990.

### HUNTING BEHAVIOR

The immatures' flight skills developed rapidly, taking longer flights and engaging in intensive crabbing and tail chasing after only one week. They spent almost 100% of their perching time on the east side of the main building, as did both adults. On 30 July, 17W stooped some Ring-billed Gulls (*Larus delawarensis*) over the lake, forcing one into the water. She also gave serious chase to a pigeon immediately after stooping the gulls.

The adults were witnessed heading north towards the downtown area (approximately two miles) on a daily basis. They would often be gone for over an hour at a time. Only once was an adult seen carrying a kill back from this area, then passing it to an immature. On 11 August, an immature was seen by a plant employee knocking a pigeon out of the air but not killing it. The pigeon escaped underneath a fence and the immature took a perch very close to it. I arrived about one hour after the incident took place and found feathers scattered on the east road, and both immatures perched directly across the road on the main building. On the same day, the immature male was observed hunting butterflies over the lake on two different occasions. He never actually caught one, but made several attempts at each butterfly.

On 18 August, employees at WP&L's district headquarters in downtown Sheboygan reported that falcons were seen stooping birds over the Sheboygan River and eating kills on a power line tower on their property. Previously, Jo Ann Thiel also witnessed Peregrines in this vicinity. Upon inspection, I found many mutes and castings below the tower on the north side of the river. Also found were pigeon feathers and part of a pigeon carcass. Dave Stanley of WP&L and I witnessed an adult Peregrine soaring very high above us at



this time also. Shortly after this, the immatures were seen heading north, usually following the parents.

By the end of August the immatures were seen less and less around the power plant. Both adults were still at the plant as of 10 September, however they are not seen as frequently due to the fact that they are not feeding the immatures anymore.

#### FALCON INFORMATION

<u>NAME</u>	<u>Right leg</u>	<u>Left leg</u>	<u>Subspecies</u>	<u>Sex</u>
Silverstreak	877-42576	42V42	pealei x anatum	Ad F
Max	816-00697	70T70	pealei x pere.	Ad M
Camille	1807-34840	17W17	1/2 peal x 1/4 anat x 1/4 pere.	Im F
*Sterling	1807-34841	15W15	n/a	Im M

\* Captive produced young added to the nest from Bob Anderson.

#### ADDITIONAL NOTES

On 2 September, 17W was found at Point Beach State Park in Two Rivers, Wisconsin with a broken wing. Initial care was administered at Memorial Drive Veterinary Clinic in Manitowoc, Wisconsin. She was then sent to Aeries Wildlife Rehabilitation Center in Shiocton, Wisconsin. During her stay here it was determined the pin in her left ulna did not hold and further medical care was needed. She was then taken to The Animal Medical Center in Appleton, Wisconsin where The Raptor Center was finally contacted and arrangements were made to send her there on 11 September. She has had her wing repinned and is under their care now. It is too early to tell at this time what her outcome will be. We are confident she is receiving the best care available, and we are hopeful for a positive outcome.

#### ACKNOWLEDGEMENTS

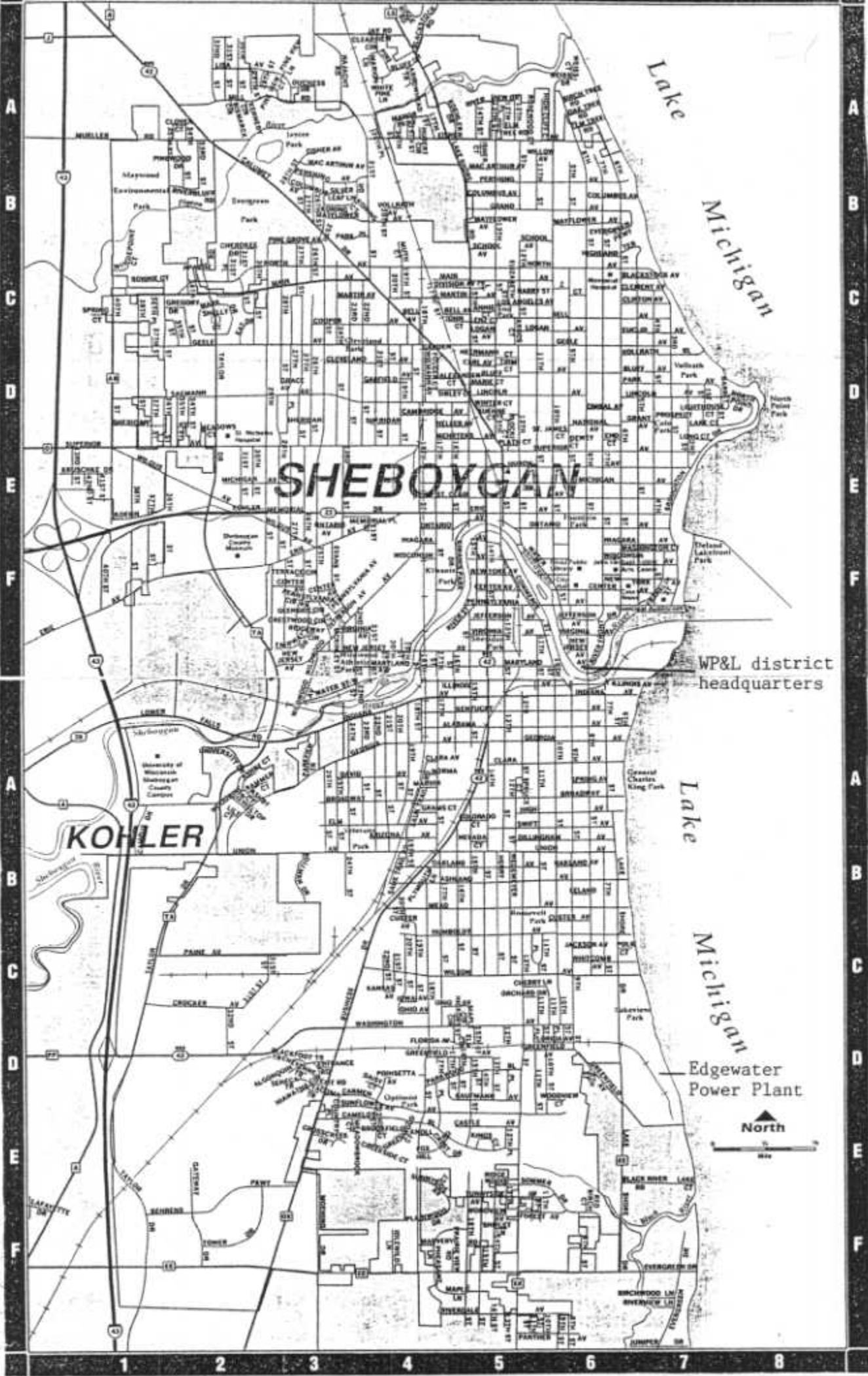
I would like to extend the warmest thanks to Ken Koele, Jo Ann Thiel, and all the employees of WP&L's Edgewater Power Plant. Their

interest and genuine concern for "the birds" and the project in general was nothing less than terrific! I enjoyed the time I spent up there, answering the many questions and giving them the chance to view the Peregrines "up close." I look forward to working with them in the future.

A sincere "thank you" to Dr. Pat Redig and all the folks at The Raptor Center for their advice and help. The Midwest Peregrine Falcon Restoration Project is bound to be a success with them forging the way!

A special "thank you" goes to The Society of Tympanuchus Cupido Pinnatus, Ltd. Their precedent setting grant to the Wisconsin Peregrine Society this year allowed us the ability to be many places at once. Without their support, the project would not have had the success it did.

Mostly, I would like to thank Greg Septon of the Milwaukee Public Museum, my boss. The trust he showed and the responsibility he gave me was almost overwhelming. The Lakefront Plan is now in full swing and its' first success was right here in Sheboygan. Soon, one will be able to visit several Peregrine eyries along the western shore of Lake Michigan and have Greg and the Wisconsin Peregrine Society to thank. The knowledge and experience I gained was invaluable, and I will never forget it!



# SHEBOYGAN

KOHLER

WP&L district headquarters

Edgewater Power Plant



## 1992 MILWAUKEE PEREGRINE NEST SITE REPORT

Greg Septon, Peregrine Project Coordinator  
Milwaukee Public Museum, 800 W. Wells St. Milwaukee, WI 53233

Once again Milwaukee proved to be the most successful nest site in Wisconsin with 4 young produced! Since 1988, 12 wild produced and 4 augmented young have fledged from this nest site. This was the fifth year Milwaukee has been an active nest site. Sibella (20V20) returned for her fourth nesting season and was joined by her mate of last year Bill (74T74). Both adults were first seen circling the First Wisconsin Center on 11 February.

A new camera system was installed this spring after our old system was "fried" during a construction error last summer. This was worked on for two days and activated on 13 February at which time Sibella was viewed in the nest box. For the next month both Sibella and Bill were seen regularly at the First Wisconsin Center and four eggs were laid between 19-25 March. These hatched between 26-28 April and the young were banded and had blood samples taken on 22 May. All four young successfully fledged between 5-10 June. Anne ended up on the ground after her first flight and suffered minor bruises. She was captured, treated and kept in isolation for the remainder of the day and returned to the nest box that night where she successfully fledged the following day. We became concerned about Anne's whereabouts when she remained unseen for four days after fledging for the second time. But were relieved to see her with her siblings and the adults on 15 June. On 17 June a heavy storm with high winds and a wall of rain hit the downtown area. During the storm 76R76 was grounded, hit by a car and killed. The three remaining young were seen regularly throughout the summer and dispersed normally. The nest box received it's annual cleaning on 3 September and new pea gravel was added. During the cleaning, Sibella greeted us inside the nest box and generally made her presence known while we were on the deck.

### 1992 Milwaukee Peregrines

<u>Name Adult</u>	<u>Sex</u>	<u>Project Band</u>	<u>Federal Band</u>
Sibella	F	20V20	987-20778
Bill	M	74T74	816-01507
<u>Name Young</u>			
Unnamed	F	76R76	1807-34805
Anne	F	77R77	1807-34806
Spaulding	M	47Z47	2206-13773
Owen	M	48Z48	2206-13774

Racine County Courthouse Release 1992, Racine, Wisconsin

1. Hack Site Attendants

Mary Annastasia Parisi  
4640 Tonyawatha Trail  
Monona, Wisconsin 53716

Jonathan Paul Melk  
Rt. 2  
Plainfield, Wisconsin 54966

2. Site Description

Racine is located at 42.20 degrees north longitude and 87.50 degrees west latitude, approximately twenty-five miles south of Milwaukee and eleven miles north of Kenosha. The site is located approximately one-half mile from Lake Michigan and is surrounded by the city of Racine. The hack box is located on the southeast corner of the Racine County courthouse and opens to the south. The courthouse is thirteen stories high and is the tallest structure in town, offering an open habitat. The major vegetation is deciduous (bushes, trees, shrubs). The hack box was installed during mid-winter of 1992, allowing for any possible nesting pairs to inhabit it during spring prior to the release. No peregrines made use of the box, however, setting the stage for the first release ever in Racine County. No nesting pairs have been recorded to date in Racine County.

3. History and Details of Young

<u>Breeder</u>	<u>Sex</u>	<u>Subspecies</u>	<u>USFWS Band</u>	<u>Project Band</u>	<u>Hatch Date</u>	<u>Age in box</u>
<u>Group I</u>						
Widener	M	pealei	2206-13800	84Z84	5/7/92	41
Widener	M	pealei	2206-13792	72Z72	5/9/92	39
Graham	F	anatum	1807-34825	93R93	5/9/92	39
Anderson	F	R.M. anatum/ anatum	1807-34831	98R98	5/8/92	40
Anderson	M	R.M. anatum/ anatum	2206-13791	71Z71	5/8/92	40
<u>Group II</u>						
Tubbs	F	pealei/M.A., pealei/M.A.	1807-34847	25W25	5/21/92	39
Tubbs	M	pealei/M.A. pealei/M.A.	2206-18406	21N21	5/21/92	39
Sherrod	M	pealei 3/4, anatum 1/4	2206-18412	27N27	5/20/92	40
Widener	M	pealei x pealei	2206-18408	23N23	5/18/92	42
Graham	M	anatum x anatum	2206-18410	25N25	5/16/92	44



#### 4. Pre-Release Details

Both groups of falcons were received from The Raptor Center in Minneapolis, Minnesota, courtesy of Northwest Airlines.

Group I arrived June 17, an overcast and rainy day with a temperature of about 60 degrees Fahrenheit. This group was very active and boisterous upon arrival in the travel boxes. All of the birds had about one-third to one-half of their bodies covered with down. They were placed into the hack box on the day of their arrival and all but one, Raid, seemed to settle into their new surroundings readily. He seemed very restless and was of some concern to us. This group was fed coturnix quail once in the morning through a chute at the top of the box to limit human contact with the birds. If temperatures were cold or all of the food was consumed by day's end, they were fed again in the evening--an average of seven quail per day. No cleaning or watering was performed until the actual release in order to limit human disturbance. This group was color-marked on June 24, the day of their release, using a fluorescent orange spray paint and a paper template. The template had a circle cut out of it, approximately two inches in diameter. Different numbers of orange dots (one or two) were sprayed onto either of the wings (left or right) or one dot on the center of the back. All banding was performed prior to their arrival in Racine.

Group II arrived June 30, an overcast and rainy day with a temperature of about 65 degrees Fahrenheit. They seemed calm and were comparatively quieter than the first group when they arrived in the travel boxes. Group II was more developed than Group I, having only about one-quarter of their bodies covered with down. They were placed in the hack box the day of their arrival and became very active, appearing quite restless. In order to limit disturbance of the released birds and to protect against food association with humans, Group II was fed very quietly and only after dark so that our presence was not detected by Group I. Therefore, they were only fed once per day, with an average of seven coturnix quail dropped through the chute each night. As with Group I, cleaning and watering of the hack box was not performed in order to limit human contact. Group II was color-marked on July 7, the day of their release, using the same color-marking scheme as Group I. Fluorescent green dots were sprayed on using the same template as used on Group I. All banding was done prior to their arrival in Racine.



5. Release Details

<u>Name</u>	<u>Project Band</u>	<u>Date of Release</u>	<u>Age at Release</u>	<u>Color Marks (a)</u>	<u>Time to First Flight</u>	<u>Time to Return After 1st Flight</u>
Philo	84Z84	6/23/92	47	R/O/1	68:31	00:55
John	72Z72	6/23/92	45	L/O/2	71:59	00:05
Pilgrim	93R93	6/23/92	45	C/O/1	68:30	01:15
Glade	98R98	6/23/92	46	R/O/2	81:35	00:15
Raid	71Z71	6/23/92	46	L/O/1	00:00	75:00
Courtney	25W25	7/7/92	47	C/G/1	08:25	(c)
Sonic	21N21	7/7/92	47	R/G/2	08:31	(c)
C.J.	27N27	7/7/92	48	L/G/2	(b)	(c)
Clyde	23N23	7/7/92	50	R/G/1	05:00	05:10
D.A.R.E.	25N25	7/7/92	52	L/G/1	08:29	(c)

## (a) Color mark codes:

First letter is location of dot(s)

L=left wing

R=right wing

C=center of back

Second letter is color of the dot(s)

O=orange

G=green

The number denotes the number of dots on the wing or back.

(b) After a rain storm the following day, July 8, C.J. was spotted at 1340 hr approximately 1/4 mile from the courthouse. He was perched on top of an apartment complex, the second tallest building in Racine.

(c) These falcons flew to the telephone tower at dusk and were identified on the courthouse the following day. Therefore, we are unsure of their return times. C.J. fledged at an unknown time.

Additional Comments on First Release

Group I was placed in the hide after color-marking for approximately thirty minutes and were released at approximately 1100 hr on June 24. The weather was sunny, around 70 degrees Fahrenheit, with an occasional breeze. The falcons were observed from ground level around the courthouse in order to monitor their activities once released and to give us the ability to respond

quickly if needed. Arrangements were made with the courthouse maintenance department to halt all rooftop activities after the release until a later date. Prior to their release, one hack board was placed on top of the courthouse roof along with a bath pan containing one medium-sized rock. A second hack board and bath pan with a rock were placed across the street on a roof facing the east side of the courthouse. This hack board site was discontinued after approximately one week for lack of use. Each hack board contained approximately twelve quail, a two day supply.

Group I was awarded the name "The Wild Bunch"--a name that they most certainly earned.

#### Additional Comments on Second Release

Group II was color-marked and kept in the hide for twenty minutes. The release took place at approximately 1200 hr on July 7. The weather was quite warm, about 80 degrees Fahrenheit, with little breeze. In order to better monitor both groups of falcons (their activities and interactions), observations were made from the ground level as well as a rooftop located at the northwest corner of the courthouse across the street. Group I was flushed off of the roof twice prior to the time of color-marking of Group II (once to prepare and once to color-mark). When flushed, Group I perched on a nearby telephone tower on both occasions. During the time that Group I was off the roof and Group II was still in the hack box, a peep-hole was placed in the rooftop door in order to identify activities at the hack boards. As well, the courthouse maintenance crew caught up on necessary rooftop duties. A three day supply of coturnix quail (enough for all ten falcons) and water was set out at this time. The quail were clipped onto two different hack boards (approximately eighteen per board), and the water was placed in two separate bath pans. Following the release of Group II, members of Group I began to return to the courthouse roof about twenty minutes later.

Group II was named "The D.A.R.E. Devils" by courthouse employees after Racine County's Drug Abuse Resistance Education program.

#### 6. Post Fledging Behavior

##### Group I

Raid was the first and only bird from "The Wild Bunch" to fledge on June 24 and was not seen again for three days. After Raid's return on June 27, the rest of Group I fledged. The most common flight activity was short, individual flights between the courthouse and the telephone tower across the street. However, only two days later (June 29), these short, solitary flights gradually changed to crabbing and tail-chasing involving from two to four falcons. Philo and John were the first to show this

behavior. As well, Philo exhibited the first observed soaring, riding thermals for about four minutes. This was the first extended flight seen. That evening, Raid took a long, deliberate stoop from the Courthouse that was believed to be hunting orientated.

During nights preceding the placement of Group II in the hack box, the box was commonly inhabited (sometimes by all five falcons). When the second group of peregrines was placed in the hack box, all five of "The Wild Bunch" roosted on the perch bars outside, with John and Philo exhibiting very aggressive behaviors. Both of these peregrines persistently climbed the bars and screeched, seemingly in an attempt to enter. Active crabbing, tail-chasing, and soaring were very common during the week Group II was still confined to the hack box. Skills improved markedly during this period of time.

Clyde, the first of the Group II falcons to fledge, was seriously harassed by members of Group I. However, the other members of Group II were not harassed by Group I when they fledged. One explanation for this may be that because Clyde fledged during daylight hours and the rest fledged at nightfall, he was easily identified as the "new guy", while the other members of Group II were less conspicuous. The morning following the release of Group II, members of Group I seemed to go well out of their way to tail-chase, crab, and all together torment Group II, hampering their already unstable and weak first flights. On several occasions, a member of Group II was actually forced to land or crash on a rooftop by their more experienced cohorts. This, plus the harassment by kestrels and crows, provided Group II with the immediate need to develop their flying skills. D.A.R.E. was crabbing and tail-chasing with "The Wild Bunch" by the morning after his fledging, June 8. The remaining members of Group II exhibited this behavior by the following day, June 9. Overall, Group II developed their flying skills more quickly than Group I, probably due to the presence of the more experienced falcons.

Although intermixing of the two groups in flight and at rest was very common, it was also not uncommon to see "The D.A.R.E. Devils" perched all together in one spot and "The Wild Bunch" (especially the three males) grouped somewhere else. Distinct segregation of the two groups was noted on at least seven different occasions throughout July. Nearly every evening, especially during colder weather, very social behavior was observed toward dusk. Commonly, five to nine falcons would congregate on a ledge of the courthouse. This behavior dissipated around July 24, corresponding to the increased intensity of hunting behavior.

The skills of all the birds continued to improve, and distinguishing between Group I and Group II in flight became very difficult after a few days. On July 10 (a very clear and warm day with a constant breeze), high-soaring, crabbing, and tail-chasing was observed by at least six falcons.

On July 14, D.A.R.E. was observed stooping a treetop. This

behavior was observed several times after this by unidentified falcons.

Crabbing and tail-chasing seemed to diminish as a major pastime beginning around July 24, as hunting became more serious and flights ranged further from the courthouse area (see "Development of Hunting Behavior").

All of the falcons seemed to readily adopt a nearby telephone tower as a perching and basking area. Short flights were often taken from the courthouse to this tower and vice versa. This eleven-story tower is located across the street from the courthouse on its west side and is constructed of many steel crossbeams and two platforms at the top. In addition to the tower, the topmost ledges along the sides of the courthouse (approximately twelve stories high), as well as rails located on the southwest corner of the roof, were other preferred perching and basking spots.

Both groups were very vocal, screeching loudly when one would land or move close to another. Often, one bird would attempt to land in the exact spot another already occupied. The most activity was concentrated early in the morning around 0430 hr or 0530 hr and again in the evening around 2000 hr or 2030 hr.

#### 7. Development of Hunting Behavior

On June 27, Raid was observed chasing prey, and was the first bird to exhibit this behavior from Group I. John and Philo were quick to follow suit and were observed chasing prey within two days after their first flights. Courtney was the first bird from Group II identified chasing prey on July 10. C.J., and D.A.R.E. were observed chasing prey soon after. It should also be mentioned that many birds that showed competent hunting behaviors in flight were not always able to be identified.

Up until about July 22, hunting seemed to be more playful than serious--attempts were short-lived and chases given up quickly. It appeared as if a few of our falcons were catching and eating insects while in flight in early July. On July 15, an unidentified peregrine took two stoops at a butterfly, knocking it to the ground. However, a progression in intensity of prey pursuits occurred around the end of July. Serious attempts at catching prey were seen often, not only around the courthouse, but in other parts of Racine. Reports of our birds being up to five miles away were brought to us by reliable sources. Our falcons were observed making persistent hunting attempts at a local beach on July 23, and Courtney was identified while eating "something".

During the cold weeks of mid-July, up to fifteen quail a night were set out for the falcons. By the end of July, however, falcons were seen pulling quail off of the clip-style hack boards, as well as carrying them in their talons. Therefore, the number of quail actually eaten per day is inconclusive for this time period. It was decided that we would begin using a tie-down



hack board exclusively from then on in order to prevent this behavior.

The number of quail fed per night dropped slowly to a total of ten by August 3. One week later, August 10, we were feeding only six quail a night. Four to five quail were put out nightly after August 13, as three to six falcons would stop by occasionally to feed. As of August 27, no falcons have fed off the hack board since August 24. Nonetheless, at least three quail are set out nightly, in case a falcon would return to feed.

#### 8. Unusual Incidents

Raid was identified by an attendant at the Pleasant Prairie Power Plant release site on July 26, for approximately three hours and on August 1, for approximately one hour. He was identified by the unusual placement of his color-marking. Raid was identified in Racine the night before, as well as the day following his flight on July 26. Philo was identified by band number feeding at the Pleasant Prairie site for approximately twenty minutes on August 13. He was identified again landing on the courthouse in Racine on August 19, but was not observed feeding at the hack board. D.A.R.E. was identified by band number at the Pleasant Prairie site briefly on August 22. He has not been identified anywhere since then. C.J. was identified by band number at the Pleasant Prairie site on August 25 for three hours and again the following day for two hours. He was observed eating on both occasions. He had not been seen in Racine since August 10.

There were four known nesting pairs of kestrels in the vicinity of the courthouse, including one located in a steeple across the street. Although the adult kestrels proved to be a periodic harassment for the peregrines, they were instrumental in helping locate our falcons. We could pinpoint the location of the falcons by simply observing the kestrel's stoops and screeching. This was especially useful when the peregrines were still weak in the air and would land frequently. In addition, crows exhibited mobbing behavior that proved useful in locating the falcons.

During a rainstorm on July 13, a peregrine falcon stooped a moving car on Main street, coming within a foot from the roof of the car.

The Racine releases seemed exceptional for the absence of accidents, injuries, or illnesses. It is worth noting, however, that three of the members of Group II (D.A.R.E., C.J., and Clyde) acquired significant chips in their talons during their time spent in the hack box. It is believed that the injuries were caused by a combination of their restless behavior, and the perch rock that was placed in the hack box prior to the addition of Group II.

## 9. Evaluation of Individual Birds

### Group I

John was probably the most vocal bird, and it was not uncommon to identify him by his long and drawn-out squawking. The least proficient lander from either of the groups, John got into many precarious situations and we were more worried about his safety than any of the other falcons. During his first few weeks of flight, he seemed very unsure of his landing capabilities and often either overshot or underestimated his target. Practice made perfect and John survived to the relief of us all. Of all the new changes in his life, John seemed the least able to adjust to the new birds in "his" hack box. While Group II was confined, John clung to the bars of the box screeching, seemingly begging to get in. Luckily, he seemed to adjust to the new arrangements within a couple of days and gave up his attempts to enter. He was one of the first birds from Group I to chase prey, but one of the last from this group to stop feeding from the courthouse hack board and leave the courthouse area.

Glade (nicknamed "Mammal") was a very large female with a hardy appetite. That is to say, she spent much of her day eating and very little of it in flight (hence the name "Mammal"). During the first few weeks after her release, Glade seemed to fly very little, and then only when she had to. Often she was the first bird to return to the courthouse after a disturbance forced her off. When she did decide to fly, however, she proved herself to be very strong with solid landings. She was aggressive and emerged as the dominant falcon of both groups. It was not uncommon for her to knock another bird off of their perch and take it for her own or to chase a bird off of "her" hack board and feed uninterrupted. She would often waddle after a bird and squawk wildly if she no longer cared to share "her" perch. Before she was released from the hack box, she was our least sociable falcon, spending most of her time in the hide out of range of the camera viewer. She was also the least developed bird from either group. Glade had the most down prior to her release and retained a tuft of down on her head for weeks after fledgling. Surprisingly, she was the second bird to leave the courthouse area permanently.

Pilgrim was not as loud and rambunctious as some of the other birds, but was often observed tail-chasing and crabbing with her "brothers" and "sisters", as well as chasing (and being chased) by the local pigeon and kestrel population. However, it is worth noting that during the days leading up to Pilgrim's dispersal, her habits seemed to sway toward being solitary. Her intensity while pursuing prey seemed to mature faster than that of the others, and we were not surprised that she was our first bird to take off permanently.



A large and impressive male falcon, Philo could be quickly recognized without the aid of a color-mark by his very light feathers. Aggressive and "ambitious", Philo was seen tail-chasing prey birds early after his release, including a very steep stoop at a crow on the courthouse lawn July 7th. Philo was a very social bird and often "played" with other falcons, turning his head upside down, screeching, and rubbing beaks with others. He was observed still eating from the hack board late into the summer. Philo was one of the falcons observed at the Pleasant Prairie hack site (see the "unusual incidents" section).

Raid became restless shortly after placement in the hack box, pacing and remaining active for long periods of time. We considered releasing him early for fear that he might injure another bird or himself. We were not surprised to watch him fledge without hesitation on the day of his release. On the morning of his return to the courthouse almost three days later, Raid seemed to be the influence that prompted the fledgling of the other falcons within hours of his appearance. To our dismay, he came in like a lion, but went out like a lamb. Although he was the first to fledge and the first to chase prey from Group I, he was one of the last birds to continue to eat from the hack board late into the summer. Raid was one of the falcons observed at the Pleasant Prairie hack site (see the "unusual incidents" section).

## Group II

Courtney was a fairly large and comparatively active female. She was observed as being sociable, especially at night, and an active participant in play with the other birds from both groups. She was the first of the Group II birds to be observed chasing prey, a pigeon, and was the first bird from Group II to disappear from the site completely. Courtney was the only female in Group II.

D.A.R.E. was quite old on the day of his release (52 days), which was of some concern to us. He seemed very restless, much more restless than the other birds, and it was suggested at one time that he should be released early in order to prevent any damage to himself or to the other birds while on the box. He was instead released along with the others in Group II. While color-marking his wing, it was observed that slight damage had occurred to his talons. He was the first D.A.R.E. Devil to voluntarily participate in crabbing and tail-chasing with Group I. Also, On July 14, D.A.R.E. was observed stooping a tree in front of the courthouse, carrying away a twig with leaves to a ledge of the courthouse where he ripped at the leaves as he would food. D.A.R.E. was one of the last of the falcons to remain dependent on the hack board daily.

It should be noted that D.A.R.E. was almost not sent to us by The Raptor Center in Minnesota due to behavioral problems that

they observed while in their care. He was observed as being anti-social, lethargic, and had a poor appetite. As time progressed, his behavior became more normal and he was sent along with the other birds in Group II. He was observed as one of our more active birds with a good appetite. D.A.R.E. was observed feeding at the Pleasant Prairie hack site (see the "unusual incidents" section).

Sonic was a sociable and active male, spending much of his time with other falcons. To our dismay, Sonic seemed to enjoy flying in the rain, as was observed on several occasions. Sonic was often seen pursuing prey and was observed several times hunting near the lake shore. Although he was seen catching a small shorebird on August 3, Sonic remained dependent on the hack board late into the summer.

A very small male falcon, Clyde proved that size is not necessarily a measure of strength. He often chased his larger cohorts and displayed assertiveness by warding the others off while on his perch or near the hack board. Exhibiting his aggressive nature, Clyde was the first bird to fledge out of his group. A quick flier, he was seen pursuing chimney swifts many times. He fed off of the hack board until mid-August. It should be noted that Clyde was one of the falcons with chipped talons.

C.J. showed a "daring" nature, often coming very close to obstacles in his flight path, such as telephone wires, buildings, and the ground. This quality seemed useful during prey chases, as he was very persistent and did not give up easily. We observed many nearly successful hunting attempts. He was not as social as the other peregrines during the day, but it was not uncommon for him to perch with the others at night. C.J. was one of the falcons with chipped talons.

#### 10. Dispersal

Pilgrim-- Last Date Seen: July 23, 1992

This bird seemed to make a gradual detachment from the rest of the falcons in the weeks preceding her disappearance. It was noted on five different occasions that Pilgrim seemed to be growing more and more anti-social, while the rest of the falcons remained extremely social. Her daily attendance to the courthouse became spotty before her final dispersion.

Glade-- Last Date Seen: July 30, 1992

Glade's disappearance was sudden and unexpected, as this was a more sedentary falcon. Her attendance before leaving was predictable.

John-- Last Date Seen: August 15, 1992

John fed off the hack board consistently up to August 9, and was commonly seen hanging around the courthouse area. After August 9, however, his attendance was inconsistent, leaving for two or three days at a time.

Philo-- Last Date Seen: August 19, 1992

Days after his leaving the Pleasant Prairie site, Philo made one more stop on the courthouse roof, surprising us all by his reappearance. He was not observed eating off of the hack board at this time.

Raid-- Last Date Seen: August 19, 1992

During the three weeks leading up to Raid's dispersion, he was often absent for up to four days at a time. When he was observed, he was feeding at the hack board.

Courtney-- Last Date Seen: August 5, 1992

Courtney's attendance became irregular during the week preceding her dispersal, having been identified about once every two days. Her pursuits of prey and attempts to capture prey changed from playful to intense. On July 23, Courtney was observed sitting on a nearby beach eating an unidentified food.

C.J.-- Last Date Seen: August 26, 1992

C.J.'s dispersion followed a three day absence from the hack board (August 6-9). He was last seen in Racine on August 10 and was not identified again until August 25 at the Pleasant Prairie site.

Clyde-- Last Date Seen: August 23, 1992

Clyde fed nearly every day up until his dispersal. Except for feeding, Clyde was absent from the courthouse area.

Sonic-- Last Date Seen: August 24, 1992

Sonic fed daily from the hack board and was the last bird to disperse. Except for feeding, Sonic was absent from the courthouse area. The hack board has since been untouched.

D.A.R.E.-- Last Date Seen: August 18, 1992

D.A.R.E. fed at the hack board approximately four times per week during the month of August. He was absent from the courthouse area on days he did not feed. He was last seen feeding from the Racine site hack board on August 17. The following day, D.A.R.E. was identified while feeding at the Pleasant Prairie site.

#### 11. Public Response

The public response in Racine can be described as nothing short of fantastic. Although it was interesting to listen to an occasional opposing viewpoint, the overwhelming attitude was very supportive of our project. The Racine project site was covered six times by local newspapers (including three front page articles), and was aired five times by local television stations. The coverage by the media did an excellent job of bringing the excitement of the Racine release into peoples' homes and generated the interest that brought many more individuals into contact with our project.

The support from within the courthouse itself was impressive, as many individuals went well out of their way to help us and the falcons out. Our project would not have been nearly as enjoyable, or perhaps even so successful, had it not been for this support and kindness.

We feel that special mention should be made of the large number of children who came to the street-level scope to watch the falcons. Some children came consistently for the entire project.

#### 12. Suggestions and Recommendations

Because our site was located in a city setting, we had a tremendous amount of interaction with the public. We were allowed many opportunities to answer questions people had regarding this project, other projects like this one, or questions about falcons themselves. The public's awareness and support, we feel, was vital to the success of the project because it got people involved. Most people had no idea what a peregrine falcon was, but by allowing them the opportunity to learn about them, we often won their support and respect for the birds and the project. We believe that we reached literally thousands of people, catching the interest of people just passing by as well as those who came specifically to view the falcons.

During the first six weeks, there was always an attendant with a spotting scope located at street level near the southeast corner of the courthouse from dawn until dusk. This person not only monitored the birds, but also answered the nearly constant barrage of questions and inquiries of people. As well, this gave



people the rare opportunity to watch a peregrine through the scope. Our dependable presence at this corner allowed for the development of "regulars" from all over Racine who frequently watched the birds, often before, after, or during work and on weekends. An enjoyable gathering of community members would gather each evening, many of whom were avid birders, as well as others that had just become interested. Also, many neighborhood children would often take time out of their play to come and watch the birds. We were amazed at the number of people of all ages and from all walks of life that this site attracted. It was a perfect opportunity for anyone to learn about and enjoy an endangered species in the middle of a city.

There was a T.V. monitor located inside the courthouse on the first floor for public viewing throughout the project. During the period in which Group I was still in the box, we were located at the monitor observing the falcons, answering peoples' questions, and selling peregrine T-shirts and other paraphernalia.

After the first release, frequent updates were posted, as well as pictures and information on the peregrine. This information seemed to be well read, and we were asked on numerous occasions when the next update was coming. The sale of paraphernalia was continued through the county clerks office.

After both groups were released and the hack box went unused, the courthouse maintenance department built a portable stand for the camera and aimed it at the hack board. This proved extremely useful when monitoring exactly which birds were eating and when. We could simply watch the monitor until a falcon landed to eat and then take an express elevator to the roof of the courthouse using the peep-hole to identify the bird.

During the end of the summer, when the falcons were spending very little time around the courthouse, there was adequate time to present educational slide shows to local clubs, churches, and organizations. However, there was no longer time to give them enough advance notice to advertize and our presentation to their members and organize a date to perform it. Often, conflicts in scheduling made presentations impossible, as most of these groups had already made previous arrangements. Therefore, it is our suggestion that the calls and arrangements for slide shows at the end of the summer be made at the beginning of the hacking while there is still time. In this way, the most people possible can be reached.

One final suggestion would be to get at least a couple of local children actively involved in the hacking. We involved two local boys (twelve and thirteen years old) who showed an exceptional interest in the birds and often came to watch them. Both boys got to name a bird from the second group and were present with us on the courthouse roof when we put them in the hack box for the first time. One of the most exciting experiences was the spotlight put on them, especially the front page picture and article written about them by the Racine Journal Times. We believe this had an impact on these boys' lives, and

hope that their exciting experiences working with the falcons will have a positive influence on their futures.

### 13. Acknowledgements

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The people of Racine County: for all their support, enthusiasm,  
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dull moment.



## PLEASANT PRAIRIE POWER PLANT KENOSHA HACK SITE, 1992

\*\* At the time this report was filed, (14 September) the Kenosha Project was still ongoing with several young feeding at the hack board.

### Attendants

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### Site Description

The Pleasant Prairie Power Plant is a coal burning plant owned by Wisconsin Electric Power Company (WEPCO). It is located approximately 6 miles west of Lake Michigan, 5 miles north of the Illinois/Wisconsin state line, and 3 miles southwest of Kenosha proper. Almost to every horizon the topography is flat and unvaried. A 643 acre parcel of land between Interstate 90/94 and the plant is managed by the Nature Conservancy as the Des Plains Natural Area. Prairie, savannah, wetland, and flood plain habitats have been restored on this land donated by the Wisconsin Energy Foundation. Tree stands are also patchily distributed between farm fields in all directions. Other notable features include the artificial ponds to the southwest, the quarry lake directly west, and the wetland directly north of the plant.

Before the site was chosen for the release, the area was flown to search for Great Horned Owl (*Bubo virginianus*) nests. None were found, but later in the season a report was received that one frequently hunted along the tracks bordering the east side of WEPCO land. It was sited two evenings later on 8/26 flying from between light poles.

A nest box was hoisted into place on the lower catwalk (elevation 350 feet) of the plant's vapor stack in January of 1991. The southeast facing box has a carpeted safety deck and a perching pole. No use of the box before the releases this summer was noted. A female peregrine did arrive at the Kenosha Memorial Hospital around the beginning of January this year. She was seen every other

day through February, so a nest box was placed on the hospital's roof in hopes that she would attract a mate. No sooner was the box in place than she ceased to return to the hospital.

Two prefabricated PVC panelled hack boxes were placed on the tripper deck (elevation 230 feet) of the plant facing west on July 6. They were each made of 5 plywood and PVC plastic pieces, not including the bars, which were light and easily bolted together. Observation was conducted from above the tripper deck on the roof of unit 1 (elevation 250 feet). Hack box 2 had a camera mounted through vertical bars so that employees of the power plant could view the birds on the monitor in the cafeteria.

### History and Details of Young

Name	Sex	Project Band	USFWS Band #	Age in Box (days)	Breeder	Subspecies
Group 1, Box 1						
Fortinbras	M	34N	2206-18419	42	H/H	P x A/A
Oberon	M	31N	2206-18416	40	H/H	P x A/TxA
Mel	M	32N	2206-18417	41	H/H	P x A/A
Group 1, Box 2						
Gonzo	M	33N	2206-18418	38	H/H	P x AxA
Scout	F	28W	1807-34850	34	Sherrod	P x 3/4P / 1/4A
Sylvia	F	24W	1807-34845	41	Sherrod	P x 3/4P / 1/4A
Hermes	M	17N	2206-18404	42	Sherrod	P x P
Group 2, Box 1						
Leopold	M	C/D	2206-18425	35	Anderson	
Fenske	M	C/G	2206-18427	37	Thee	
Athena	F	1/3	1807-34863	38	Graham	
Rachel	F	1/9	1807-34864	37	Anderson	
Group 2, Box 2						
Mithril	M	C/B	2206-18423	39	Anderson	
Laertes	M	C/C	2206-18424	38	Graham	
Otis	M	C/E	2206-18426	37	Thee	
Candace	M	2/0	1807-34865	37	Anderson	

## Pre-Release Details

### Group 1:

The first group of Peregrines arrived on 7/8 in the early afternoon. They were flown from the Raptor Center in Minneapolis to Milwaukee by Northwest Airlines and brought to the plant by car. Blood samples, projects banding, and USFWS banding had all been done at the Center. The birds were immediately placed in the boxes and were exceedingly active throughout the remainder of the afternoon. For the first couple of hours, at least one bird was pacing, flapping, or jumping at the bars at any given moment. Their restlessness was, no doubt, in part due to a long journey in small kennels, but these birds were also well developed and near fledging age.

Originally, the females were more active than the males. After a day or so in the box, the situation reversed itself. Hack box 1 was almost always less active than box 2. Gonzo became a celebrity because of his fondness for staring at his reflection in the lens of the camera. On 7/11, he did a lot of flapping in the afternoon sun and began to breathe at an accelerated rate. A water pan was placed in the box in hopes that he would bath and cool down. He did take a bath and his breathing was back to normal within 20 minutes. The water was changed on 7/13.

Daily feedings consisted of the number of quail equal to the number of Peregrines in the box plus one until the day before the release. Feedings were normally performed in the late afternoon, but on the day of the release they were fed 2 less quail than usual in the morning. A break in the rain and wind presented a chance for the first release on 7/14.

### Group 2:

The second group of falcons arrived in the late morning on 7/17. They, too, were flown by Northwest Airlines from Minneapolis to Milwaukee and driven from Milwaukee to the plant. That evening, it was noticed that Candace had a limp favoring her left leg. Her progress was monitored until 7/24, at which time her healing was deemed insufficient for release and she was flown to the Raptor Center in the middle of the afternoon. After an exam, we were told that Candace had broken her left tibial crest. It was guessed that she broke her leg while hanging on the camera mount. because she had never been released and no limp was detected before she was placed in the box.



The second group of falcons had much more down than the first and exhibited extreme restlessness and aggression soon after they were placed in the boxes. For instance, a box 2 male grabbed another male's retrices with his talons and was drug around the box before he would release his hold. Some biting was also observed in box 2. Wooden perches were placed in the boxes later that day and such aggressive acts were not seen as frequently. Whether the perches were the cause of the effect or not is unknown. Much more flapping and pacing was seen in box 2 than in box 1. Feedings were done in the same manner as with group 1. The second release took place in the late afternoon of 7/24.

### Release Details

Name	Project Band	Date of Release	Age at Release (days)	Color Marks	Time to Flight	Time to Return after 1st Flight
Group 1						
Fortinbras	34N	7/14	49	RO1	00:04	28:25
Oberon	31N	7/14	47	LO1	00:05	28:26
Mel	32N	7/14	48	CO1	00:24	40:06
Gonzo	33N	7/14	45	RO2	04:15	67:50
Scout	28W	7/14	41	LO2	03:55	24:45
Sylvia	24W	7/14	48	CO2	06:00	46:35
Hermes	17N	7/14	49	CG1	02:25	51:18
Group 2						
Mithril	C/B	7/24	47	RG1	00:43	12:13
Laertes	C/C	7/24	46	LG1	?	?
Otis	C/E	7/24	45	RG2	01:14	?
Leopold	C/D	7/24	43	LG2	?	?
Candace	2/0	8/14	65	CG2	01:11	26:10
Fenske	C/G	7/24	45	RO1G1	?	?
Athena	1/3	8/5	58	LO1G1	11:17	00:01
Rachel	1/9	7/24	45	CO1G1	25:09	?

A press conference was held at 10:00 a.m. when the falcons were color marked on 7/10. The birds were marked, but they could not be released as planned due to excessive wind. Wind and rain further delayed the release until an opportunity presented itself at 1:20 p.m. on 7/14.

On 7/24, Candace was separated and the rest of box 2 was color marked and placed in the hide. While Candace was transported to the Raptor Center by car and plane, the falcons in box 1 were color

marked and placed in the hide. The falcons in both boxes were allowed to sit in the hide for at least 30 minutes before release took place at 5:43 p.m.

After her first release, injury, and visit to the Raptor Center; Athena was rereleased on 8/5 at 11:30 am. Also upon her return from Minneapolis, Candace was released on 8/14 at 1:45 p.m.

Sylvia ended up on the lower west deck after an initial unsuccessful flight on 7/14. She remained on the deck so we placed one of the two hack boards near her so that she could eat if hungry. She did not eat until she returned to the tripper deck on 7/16. At that point the board was returned to the tripper deck.

Laertes, Mithril, and Leopold were all harassed by group 1 birds while in the process of fledging.

24 quail were put on the hack boards on the day of the release. From the 4th day after the release, approximately 1.5 quail per falcon were placed on the boards daily. The bath pan was scrubbed, the water was changed, and the hack boards were cleaned and replenished nightly.

### Post Fledging Behavior

#### Group 1:

The day after the release, the males in the first group were making multiple medium distance flights (about 400m), about three times every two hours. The box 1 males in particular showed a great ability to fly within days of release. By ten days, a few of the males were confident enough to harass Red-tailed Hawks (*Buteo jamaicensis*) and American Kestrels (*Falco sparverius*) which ventured near the plant. The females by comparison were much slower to develop flight skills. For the first week they seldom flew and looked unsure while airborne.

Dogfighting was first seen among the males of the first group on the second day after release. It was initiated by 77R from Milwaukee on her first of what would become regular visits. Thereafter, the males dogfought amongst themselves and with Anne, a visiting female that fledged from the Milwaukee nest this year. The females from this site were occasionally unwilling participants. The females willingly joined in the dogfights around 17 days after release. It is thought that Anne's willingness to and skill at dogfighting sped the development of this playful interaction between the falcons at our site.

The group 1 falcons preferred to perch on the roofs of the precipitators for the first two weeks after release. Occasionally they could be found on a nearby cable tower to the west or north or on

the antenna tower in the transformer yard. The third week saw a shift in diurnal perching to the stack catwalks, coal pile, and pond area to the north. Toward the end of August, several of the second group males were seen perching on a pipe 15 feet below the south ledge of the plant roof. At the same time, up to 8 falcons at a time were seen perching on the vacant industrial building directly south of the plant and the Rust-oleum factory.

Before the fifth day after release, no roosting locations were discovered. However, falcons were consistently seen roosting on the stack's lower catwalk (nest box level) after that time. On a couple of occasions, Peregrines did roost on the pipe perch on the south side of the plant.

#### Group 2:

As with the first group, the females were the last to fledge and not as sure of themselves as the males were. This group seemed to improve their flying skills faster, most likely because of interaction with the first group. Group 1 was rather aggressive towards Group 2 during the first few days, knocking them off their perches and trying to dogfight with them on their first few flights. After the first few days, once the second group had more flying experience, there was a lot of dogfighting, especially among the males. Laertes, the best flier from the second group, often even initiated the dogfights.

This group didn't perch or roost on the precipitators nearly as much as Group 1 did during its first post-fledging days. Group 2 peregrines liked to eat and perch under the hack boxes, especially on warm, sunny days. Now that there were twice as many peregrines that needed to eat, there was more aggression at the hack boards, particularly if the number of quail left was getting low. Some falcons would grab the quail out from underneath another one! The females were especially possessive about their food.

#### Development of Hunting Behavior

Most of the falcons in both groups were extremely well aware of bird and insect movement from the time they were placed in the hack boxes. After spotting a moving object, the falcon would intently follow its path by moving its head. Both groups chased butterflies within days of release, but group 1 engaged in pursuit of birds before group 2 and male falcons pursued birds before females.

Due to their great abundance, pigeons (*Columba livia*) were the primary target of early chases by the Peregrines in both groups. Falcons from both groups were observed chasing Mourning Doves

(*Zenaida macroura*) and American Kestrels (*Falco sparverius*) over land and Canada Geese (*Branta canadensis*), Great Blue Herons (*Ardea herodias*), and Belted Kingfishers (*Ceryle alcyon*) over water.

#### Group 1:

Group 1 males began to tail-chase pigeons a (*Columba livia*) 4 days after release when they were around 50 days old. At first, the chases were short in duration. Within a week the length of the chases had grown to approximately 8 seconds. Group 1 females began to tail chase pigeons at 58 days of age. It is likely that they developed interest in pigeon chasing later than the males because they were larger and consequently slower to develop flight skills. The females engaged in lengthy chases at about 68 days. Reports of pigeons killed by group 1 falcons began to arrive when the group was around 78 days old, but no pigeons were seen killed and eaten until the falcons were 83 days old. Hermes was seen carrying and then eating what appeared to be a warbler-sized bird when he was 62 days old.

The tactics involved in chasing pigeons gradually evolved from tail-chasing to stooping with an intermediate period of shallow stooping. Gonzo was observed spying from the catwalk of the stack (nest box level) and from there stooping Mourning Doves (*Zenaida macroura*) east of the Crusher House.

#### Group 2:

Group 2 evolved in exactly the same manner as its predecessor. However, males started tail-chasing for short distances at 53 days and females at 67 days. Chases of 8 seconds or longer were observed after 66 days. Candace showed interest in short tail-chases 1 week after release. Her quickly developed interest in pigeons (*columba livia*) after release, with respect to the other females, was undoubtedly due to her greater age at release. The approximate date of the first kill for the second group is unknown as it was complicated by the successful hunting of the first group. However, on 8/26 Gonzo and Otis jumped off the tripper deck to chase a pigeon. The strike was not seen, but Otis had the pigeon pinned to the lower west deck and killed it with a blow to the neck after 2-3 minutes of struggling. he proceeded to guard his kill from Gonzo and clean out most of the chest cavity. It is unknown to whom the kill should be accredited.

## Unusual Incidents

### Injuries:

On 7/16 we found Scout laying down at the top of a stairway on the lower east deck. Due to her position in the path of human traffic and the fact that we had not yet seen a falcon lie down, we got closer for a better view. She did not wake up or acknowledge us until we had approached within 10 feet and made a good deal of noise. Then she was startled and flew a short, weak flight to the ledge 50 feet away. She remained there for about an hour then flew out of sight. The next day she appeared lethargic at times but she improved and was back to normal by 7/18. On 7/17 we were informed by a plant employee that an observer had seen a falcon crash into the plant wall near where we found Scout the day before. It is assumed that Scout ran into the wall in flight and was dazed when we approached her. It is doubtful that she sustained any lasting injury from the collision.

It was noticed on 7/18 that Candace was limping, favoring her right leg, when still confined to the hack box. She was very active, but her limp was unmistakable. After careful monitoring, she was sent to the Raptor Center on 7/24, just prior to releasing the others. Candace had sustained a broken tibial crest in her right leg. She remained at the Raptor Center until 8/14. She was returned and released that day and showed no signs of injury.

Athena was found on the ground just around the north end of the plant from the boxes, on 7/26 in the early morning. She had a limp which was not present before departure from the tripper deck. So it is assumed that the impact upon landing created the injury. She was captured in the early afternoon that same day and put back on the tripper deck to protect her from terrestrial predators.

Again, on 7/28 she was found in the same place in the morning. She managed to perch on a short chain link fence, but the male kestrel (*Falco sparverius*) from a nest on the northwest corner of the plant pushed her off. She was returned to the tripper deck that morning. She continued to limp as we watched her on the tripper deck so it was decided she needed to be examined.

Athena evaded capture on the deck and flew to several areas east of the plant before she was caught on 7/30, next to a warehouse, in the rain. Her visit to the Raptor Center revealed a slightly fractured pubis. Athena arrived back at the plant on 8/4 and was rereleased the next day. She exhibited no limp and was flying nicely within hours.



### Non-site Peregrines:

A juvenile female, not from this hack site, arrived on 7/15 and made some aggressive stoops and walking charges at our falcons perched on the precipitator roofs. Her aggression appeared to be aimed primarily at Scout, the only female present. The visitor had a project band on her right leg, no color markings, and her flight skills were very well developed.

She was seen at the site nearly every day between 7/15 and 8/5 and fed on at least 5 occasions. Due to excess dirt on the band, we were unable to read it until 8/3, at which time she was identified as 77R. Her name is Anne, who fledged from this year's nest on the First Wisconsin Center in Milwaukee.

Four falcons from the Racine hack site also visited our site. Raid (71Z) showed up on 7/26 for nearly three hours and again 8/1 for an hour. He engaged in aerial play with our falcons. Philo (84Z) came on 8/13 and stayed for 20 minutes. D.A.R.E. (25N) visited our site on 8/22, 8/26, 8/28, and 9/2. He typically ate and perched nearby for a few hours. C.J. (27N) showed up for 2-3 hours on 8/25 and 8/26 and ate both days.

### Evaluation of Individual Birds

#### Group 1:

**Gonzo** - Gonzo was our star from the beginning. When he arrived he had a few tufts of fluff on the top of his head and a rather skinny neck, thus the name "Gonzo". Whenever we'd turn the monitor on, there Gonzo was, sitting in front of the camera nodding his head up and down. He most likely saw his reflection in the lens. It took him a little longer to become as good a flier as Oberon and Fortinbras, but after a few days he had dogfighting mastered.

**Oberon** - Oberon acted much like the other birds in his hack box, they all seemed to be pretty quiet. When it came to flying, Oberon proved to be a very talented bird! Within less than 48 hours of fledging, he was already dogfighting with the visitor, Anne, and practicing stoops. The last we saw of him was on July 17, three days after the release. We have high hopes for him however, because of his flying talent. Hopefully he quickly learned to hunt and is faring well.

**Fortinbras** - Fortinbras was another fairly quiet bird in Oberon's box that turned out to be a great flier. He was also dogfighting within the first 48 hours of fledging. He was our first brave tiercel to fledge.

**Mel** - Mel was also a quiet bird from Oberon's box. It took him a day or two more to master landing and stooping but once he got the hang of it, he was flying just as well as Oberon and Fortinbras. He was more aggressive at the hack boards than the other males.

**Scout** - Scout is our very large female. She is the one that we suspect hit her head when we found her half-dazed on the fan roof. Her talon also got caught on a sandbag underneath the hack boxes and yanked her foot around until she could release it. Despite all these problems she has turned out well. She has always been an aggressive female, bossing around any other falcons or tiercels that would dare land near her.

**Sylvia** - Sylvia is an aggressive female, always bossing around and chasing the other tiercels off her perch. She is also very vocal, screaming at us a lot when she flies by or if she perches nearby. Our last bird to fledge, she had some trouble learning how to land and how to fly with the updrafts and thermals. She didn't fly very often the first few days but she eventually got the hang of it.

**Hermes** - Hermes seemed to keep to himself a lot. His flying ability is very close to Oberon and Fortinbras. We believe he made the first kill, a small warbler-sized bird. He has a very dark back and wings that is typical of being a full Peale's peregrine.

#### Group 2:

**Athena** - Athena has a split personality. When we tried to catch her to mark her, she jumped forward at us screeching and fighting the whole time, therefore we named her after the goddess of war. When released, she sat in the corner of the roof facing the wall for hours on end. She was also the last to fledge and couldn't figure out why she couldn't fly up on the ledge when standing right up against it. She preferred to lay down a lot, especially after being injured. After all of the adventures of trying to catch her because of her leg injury, and after her rerelease, she did just fine. Now she acts like any of our other vicious, defensive females. When injured, if any other falcon would land near her on the ledge, she would waddle over and sometimes literally push them off!

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**Laertes** - Laertes is our Oberon or Fortinbras of the second group. He was doing all sorts of aerial tricks within the first days of flying. As soon as he would perch somewhere, he'd fly off again. We suspect he is the one we almost named "Spaz" because of his hyper-activity.

**Fenske** - Fenske exhibited normal behavior. He fledged the day we took the bars off and had a couple of wobbly flights and landings but improved a little over the next few days. Even though he could fly and land alright, he had no-where near the flying ability that Oberon had when he disappeared. Fenske was last seen on July 29, five days after the release. He only ate once and that was three days after he fledged and a day before he disappeared. We aren't quite as optimistic about Fenske as we were about Oberon but he could always surprise us and show up somewhere in the future!

**Otis** - We had a false alarm with Otis. We didn't see him fledge so we thought he was sick or injured and still in the hack box. Luckily we found him perched on a train car healthy and fine. He had an easy going personality and stayed near the plant. He was commonly seen dogfighting.

**Rachel** - Typical of females, Rachel was the second to last to fledge (the last being Athena). Her flight at the beginning was pretty shaky, and she didn't fly very often, only two or three times a day for the first few days. As usual, with time she improved and flies very well now. Once again, she's very loud and defensive if anyone gets in her way. She was especially aggressive at the hack boards.

**Mithril** - Mithril is a pretty average flier but a very submissive and quiet bird. He spends a lot of time just sitting on the tripper deck ledge. We also noticed that he is our only peregrine with yellow feet, all the other birds had blue-gray colored feet.

**Leopold** - Leopold is our youngest bird of the second group. When he fledged he still had some fluff left underneath and his tail feathers weren't very long, yet he flies very well and dogfights often.

**Candace** - Even though she had to wait until she was 66 days old until she could try out her wings (because of her injury), Candace caught up very quickly with the other falcons in flying ability. She was dogfighting within four days, much faster than any other female,

undoubtedly due to being older when released. Within the first 24 hours of fledging she landed on the ground but managed to have enough muscle power to fly back up to the top of the roof. She spends a lot of time perched on the camera.

Candace also is our only peregrine who doesn't seem to be too afraid of humans. She would fly very close to us and would sometimes land on the ledge, only about 15 feet away and just stare at us until we attempted to frighten her with movement and yells. However, she does have her limit and if we got very close or screamed she would fly away.

## Dispersal

### Group 1:

Oberon was present and ate each day for 3 days after his release. After that time, he was not seen again. Mel also disappeared suddenly when he was 72 days old. The rest of the group began to stay away from the plant for a day or two when they were around 81 days old.

### Group 2:

Fenske was checked in daily for 5 days after release, but only observed feeding once before he disappeared. The rest of his group began to stay away from the plant for a couple of days at a time when they were 77 days old.

Name	Band	Last Day Seen	Age last seen (Days)
<u>Group 1:</u>			
Fortinbras	34N	8/31	98
Oberon	31N	7/17	50
Mel	32N	8/6	72
Gonzo	33N	9/1	93
Scout	28W	8/22	79
Sylvia	24W	9/2	97
Hermes	17N	9/2	98
<u>Group 2:</u>			
Mithril	C/B	9/4	87
Laertes	C/C	9/2	85
Otis	C/E	9/2	84
Leopold	C/D	9/4	84
Candace	2/0	9/2	84
Fenske	C/G	7/29	49
Athena	1/3	8/31	83
Rachel	1/9	9/2	84

\*Lengthy observation periods ceased on 9/2, but falcons observed after that date are noted in this table.

## Public Response

The public did not have direct access to the site for safety reasons. Everyone visiting the site needed security clearance from WEPCO. However, there were several newspaper articles in Milwaukee and Kenosha papers and a couple of television news stories on the release. All of the interviewing, photographing, and filming was done at the press conference held on the day the first group was color marked. On the whole, the presentations of the Lakefront Project and the release at this site were accurate and supportive.

The employees at WEPCO were very interested in the release from the beginning and eagerly watched the development of the falcons toward independence. They were especially interested in the physical and behavioral differences of the sexes and the development of hunting techniques. A camera was placed on hack box 2 before release of the second group and facing the hack boards thereafter so that employees could watch the falcons on a monitor in the cafeteria. A daily bulletin describing the activity of the falcons was placed under the monitor.

Notable visitors to the site included: Russian scientists Vladimir Panchenko and Natasha Anzigatova, Wisconsin wildlife biologist and author Dr. Fran Hamerstrom, and world renowned Peregrine Falcon authority from Brigham Young University, Professor Clayton M. White.

## Suggestions

Before release, most of the falcons grasped at the bars while flapping, but they quickly fell to the floor by sliding down the bars. The camera mount allowed the falcons in box 2 to remain off the floor for an extended period of time and consequently provided positive reinforcement for jumping at the bars. It is postulated that Candace jumped at the bars more often than she would have if the mount had not been present, increasing her risk of injury from awkward landing and eventually leading to her fracture of the tibial crest. Therefore, it is suggested that cameras or other apparatus not be mounted where confined falcons can gain a foothold.



## Acknowledgements

Without the help of everyone involved, the Kenosha hack site would never have existed. The Wisconsin Peregrine Society is very grateful for the grant from the Wisconsin Energy Foundation and the help from the people at WEPCO: Plant Manager Tom Fehring, Program Engineer Ed Neckar, Engineer Joel Johnson, Dan Mooney from Video Productions, and Lora Hyler from Public Relations. Charlie Gieck and Randy Jurewicz of the Bureau of Endangered Resources at the Wisconsin Department of Natural Resources were also instrumental in the organization of the release.

This site, and all other facets of the Lakefront Peregrine Project, were dependant on the knowledge and hard work of Greg Septon of the Milwaukee Public Museum and Jim Marks of the Wisconsin Peregrine Society. Thanks for your help and support, Greg and Jim!

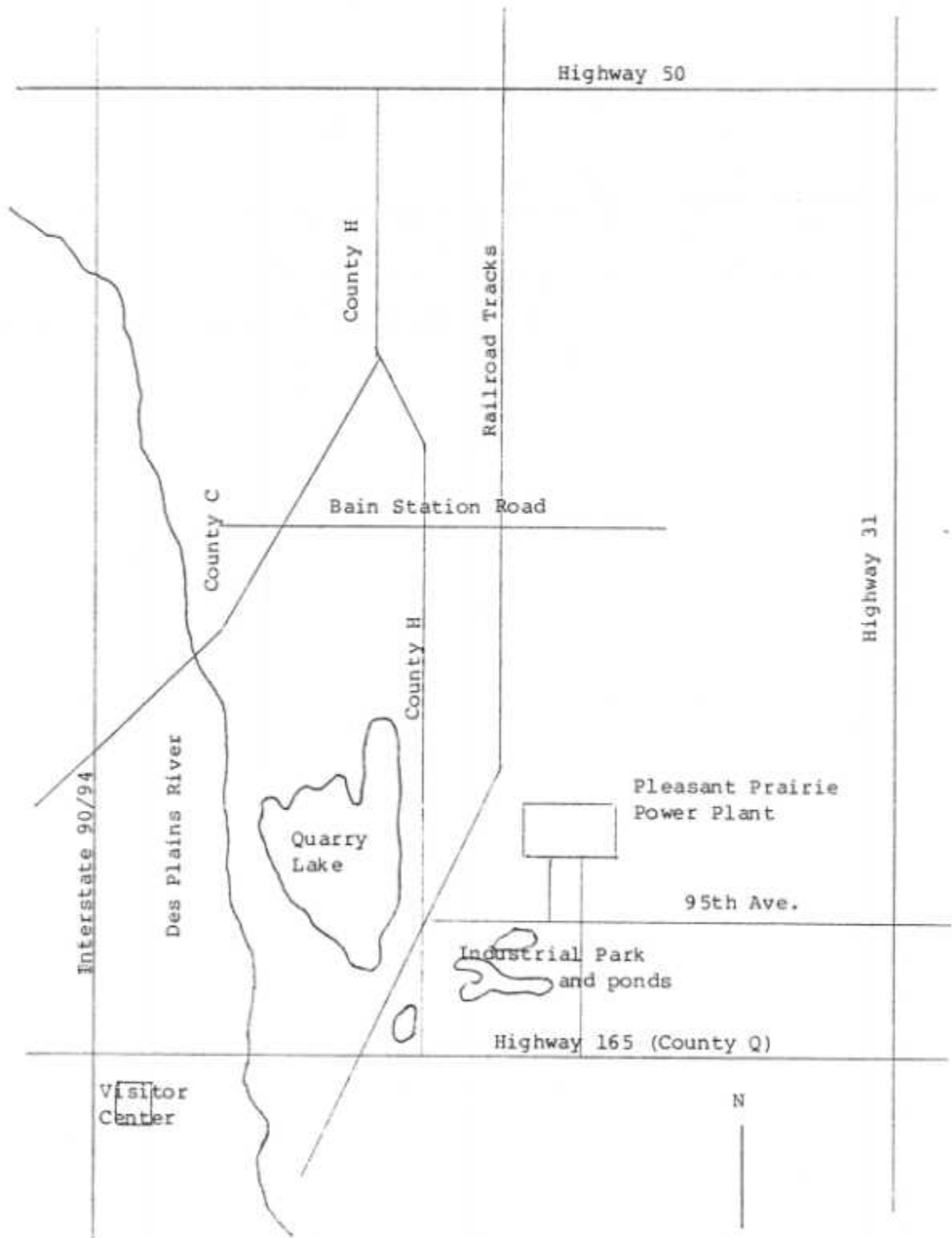
## Faunal List

Abundant: Canada Goose (*Branta canadensis*), Great Blue Heron (*Ardea herodias*), Mourning Dove (*Zenaidura macroura*), Pigeon (*Columba livia*), Killdeer (*Charadrius vociferus*), Song Sparrow (*Melospiza melodia*).

Present: Avocet (*Recurvirostra americana*), Black Scoter (*Melanitta nigra*), Great Egret (*Casmerodius albus*), Meadowlark (*Sturnella magna*), American Robin (*Turdus migratorius*), Eastern Kingbird (*Tyrannus tyrannus*), American Goldfinch (*Carduelis tristis*), Red-tailed Hawk (*Buteo jamaicensis*), American Kestrel (*Falco sparverius*), Belted Kingfisher (*Ceryle alcyon*), American Crow (*Corvus imparatus*), Eastern Bluebird (*Sialia sialis*), Red-winged Blackbird (*Agelaius phoeniceus*), Tree Swallow (*Tachycineta bicolor*), Barn Swallow (*Hirundo rustica*), Pied-billed Grebe (*Podilymbus podiceps*), Spotted Sandpiper (*Actitis macularia*), Indigo Bunting (*Passerina cyanea*), American Bittern (*Botaurus lentiginosus*), Blue Jay (*Cyanocitta cristata*), Cardinal (*Cardinalis cardinalis*), Bobolink (*Dolichonyx oryzivorus*), Herring Gull (*Larus argentatus*), Ring-billed Gull (*Larus delawarensis*), Common Nighthawk (*Chordeiles minor*), Great Horned Owl (*Bubo virginianus*).



Local Area



Power Plant Grounds

